

The Leader of Domestic Motion Control Solution Provider

ADTECH (SHENZHEN) TECHNOLOGY CO., LTD.

Address: 5th Floor, Tianxia IC Industrial Park, Majialong, Yiyuan Road, Nanshan District, Shenzhen City, Guangdong Province, P.R.China

Tel : +86-755-2609 9116

Fax: +86-755-2672 2718

Mob: +86-150 1258 2329

Email: export@machine-controller.com

Website: www.machine-controller.com

www.motion-control.net

www.adtechen.com

Headquarter (Shanghai)

Shanghai STEP Electric Corporation.

Add: No 289, Xinqin Road, Jiading District

Shanghai, China. Post Code: 201801

Robot Factory

Add: No.1560, Siyi Road, Jiading District

Shanghai, China. Post Code: 201801

ADTECH

Product Selection Guide



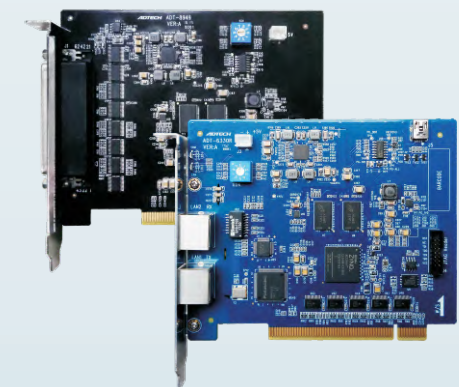
SCARA Robot



Motion Controller



Servo Motor/Driver



Motion control card / device



ADTECH (SHENZHEN) TECHNOLOGY CO., LTD. was established in 2002. As the leader of domestic motion control solutions provider, ADTECH had been build up the motion control, motor drive, CNC control system application and industrial robots in total four major products. ADTECH products are widely used in industrial robots, printing and packaging, metal processing, light textile, home, electronic equipment, special machine tools and other fields, become the representative brand in the field of motion control industry application.

Companies in key cities across the country set up a liaison office and service centers, and gradually establish a global sales and service network, products have been exported to Europe and the United States, the Middle East, Southeast Asia, Hong Kong and Taiwan, 103 countries and regions.



Shenzhen Head office



Shenzhen sales centre



ADTECH GongMing factory



Automation Production Line

Contents

Motion control card / device(datasheet) ----- 01

ADT-8900 Popular series motion control card ----- 03

ADT-8909 high pefomance ----- 07

AVS series vision definition system ----- 11

3-6 axis dispensing control system ----- 13

4-6 axis vision dispensing control system ----- 15

2-4 axis hair planting machine control system (7 inch screen) ----- 17

High-performance 3-6 axis hair planting machine controller ----- 18

CNC milling machine control system ----- 19

High-performance 6 axis CNC milling machine control system ----- 21

CNC lathe/milling machine control system ----- 23

12-axis spring machine control system ----- 25

Full automatic template control system ----- 27

SCARA Robot control system ----- 29

SCARA Robot control system ----- 31

servo motor ----- 33

QX series servo driver (selection table) ----- 37

QX series servo motor/driver ----- 39

QXSS series motor dimension list (unit: mm) ----- 47

QXSM series motor size table (unit: mm) ----- 49

Industry Application Controller-CNC Spring Controller ----- 51

Brush Making Controller ----- 52

Dispensing Controller ----- 54

Punching CNC Controller ----- 55

CNC Engraving Control System ----- 56

Color screen series key machine system ----- 57

AR Series 4 axis scara robot ----- 59

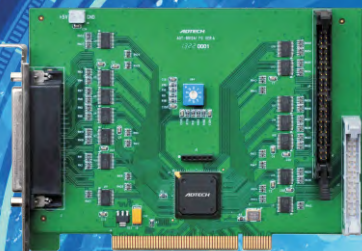
SD series - six - axis robot ----- 62

SP Series Palletizing Robot ----- 63

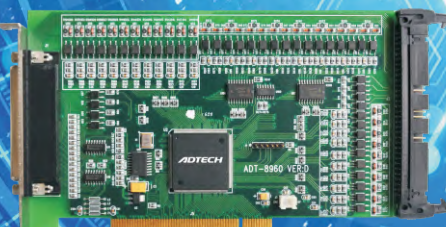
Motion control card / device (DATASHEET)

PCI card									PCI-E card	PCI card								Motion controller		
Type		ADT-8900 Popular series				ADT-8909 High peformance series			ADT-8941	Type	Classic series			RTEX series	EtherCAT	IO Extended series		1600 series		
Application		Universal point				Advanced point/Track motion			Universal point	Application	Advanced point/Track motion			Bus	Bus	IO Extended		Bus Advanced point Track motion		
Model		ADT-8920	ADT-8940	ADT-8960	ADT-8912	ADT-8949	ADT-8969	ADT-8989	ADT-8941	Model	ADT-850	ADT-856	ADT-8948	ADT-6330R	ADT-6320E	ADT-IO3224	ADT-IO7142	AMC1600E	AMC1600P	
Appearance										Appearance										
External interface	Axle number	2	4	6	12	4	6	8	4	External interface	Axle number	4	6	4	32	32	—	—	32 axis bus +6 axis pulse	6 axis pulse
	Pulse frequency	2M				5M			2M		Pulse frequency	4M			—	—	—	—	—	—
	Digital input	24	40	32	68	42	42	42	40		Digital input	32	48	32	16*N	16*N	32	67	24	24
	Digital output	12	16	16	24 (Special-purpose)	24	24	24	16		Digital output	32	32	32	16*N	16*N	24	42	24	24
	Matching I/O	—	—	16	—	—	—	—	—		encoder shaft	4	6	4	—	—	—	2	6	6
	encoder shaft	—	4	6	12	4	6	8	4											
Speed type	Symmetric T type	√				√			√	Speed type	Symmetric T type	√			√	√	—	—	√	√
	Asymmetric T-type	—				√			—		Asymmetric T-type	√			√	√	—	—	√	√
	S curve	√				√			√		S curve	√			√	√	—	—	√	√
Curve layout	Coordinate system group	1				2			1	Curve layout	Coordinate system group	1			2	2	—	—	2	2
	Cache instruction	2M Cache				10000 Segment			2M Cache		Cache instruction	1 Segment			10000 Segment	10000 Segment	—	—	10000 Segment	10000 Segment
Motion control	Linear interpolation	2 axis	2~4 axis	2~6 axis	2~12 axis	2~4 axis	2~6 axis	2~8 axis	2~4 axis	Motion control	Linear interpolation	√			√	√	—	—	√	√
	Circular interpolation	√				√			√		Circular interpolation	√			√	√	—	—	√	√
	Continuous interpolation	√				√			√		Continuous interpolation	√			√	√	—	—	√	√

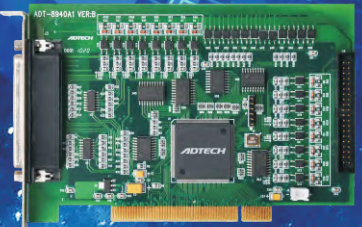
ADT-8900 Popular series motion control card



ADT-8912 (12 axis)



ADT-8960 (6 axis)



ADT-8940 (4 axis)

Stable

Intelligent

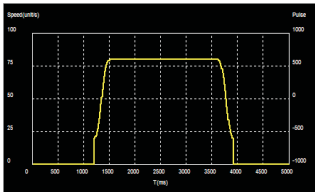
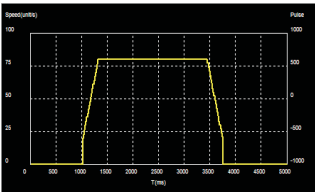
Economical

Selection Guide

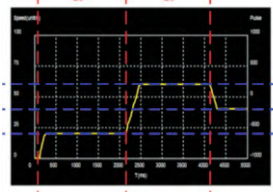
type		ADT-8900 series			
Model name		ADT-8920	ADT-8940	ADT-8960	ADT-8912
Suitable occasion		General point motion			
Hardware configuration and performance	number of axes	2 axis	4 axis	6 axis	12 axis
	Maximum pulse frequency	2M			
	Number of encoder shafts	0	4 axis	6 axis	12 axis
	Encoder feedback frequency	2M			
	Maximum input frequency of hand wheel	2M			
	ALM、RDY、INP、SVON	√			
	General digital input(including limit origin)	24	40	32	68
	Digital output	12	16	16	24 (Servo enable and alarm clear)
Point control	Configurable I/O	0	0	16	0
	JOG motion	√			
	PTP motion	√			
	T-curve motion	√			
	S-shaped curvilinear motion	√			
	Shifting in motion	√	√	√	—
High speed IO control	Changing position in motion	√			
	Hardware urgent stop	√	√	√	—
	Hardware limit	√			
Software track control	High speed latch	—	√	—	—
	Multi axis linear interpolation	√			
	2-axis arc interpolation	√			
	Number of coordinate system groups	1			
Cache space		—	√	√	—

Typical performance description

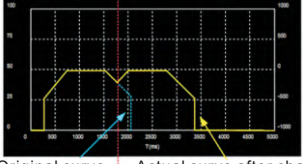
Symmetrical T / S type acceleration and deceleration



Online speed change / online change of target position



Change target position during deceleration

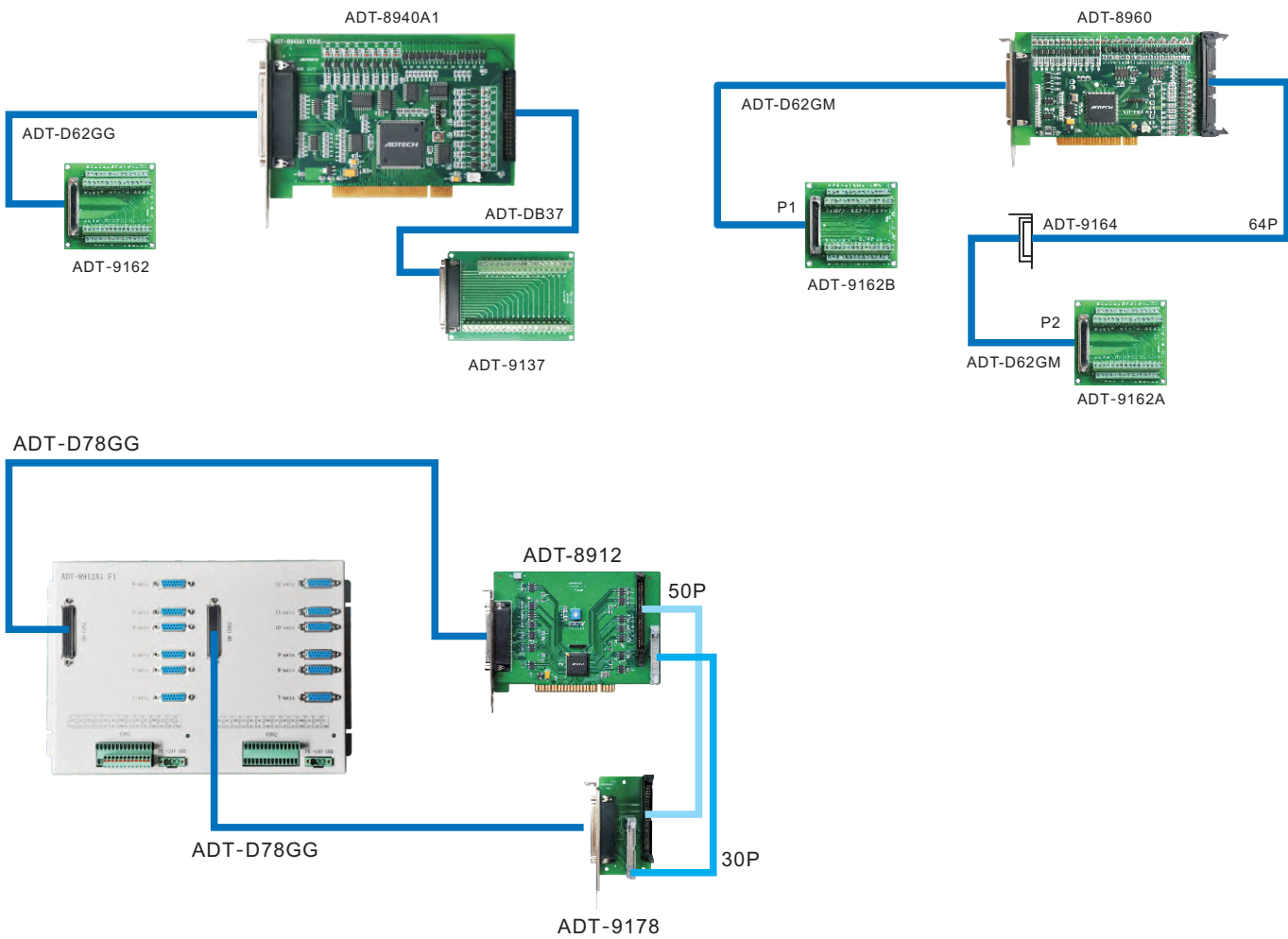


Original curve Actual curve after changing target position

Product configuration

Product model	Name	Model description	Dimension parameters
ADT-8940A1	Motion control card ADT-8940A1		160mm×107mm×1
	Terminal block ADT-9162A		136mm×72mm×1
	Terminal block ADT-9137		125mm×87.6mm×1
	Data transmission line ADT-D62GG		1.5M×1
	Flat line DB37		280mm×1
	Data transmission line ADT-D37GG		1.5M×1
ADT-8960	Motion control card ADT-8960		193mm×109mm×1
	Terminal block ADT-9162A		136mm×72mm×1
	Terminal block ADT-9162B		136mm×72mm×1
	Data transmission line ADT-D62GM		1.5M×2
	Terminal block ADT-9164		58mm×101mm×1
	Wiring 64P,28AWG		270mm×1
ADT-8912A1	Motion control card ADT-8912A1		178mm×109mm×1
	Terminal block ADT-8912 F1		310mm×212mm×1
	Terminal block ADT-9178B		136mm×72mm×1
	Data transmission line ADT-D78GG		1.5M×2
	Wiring 50P		300mm×1
	Wiring 30P		300mm×1

Wiring diagram



Application area

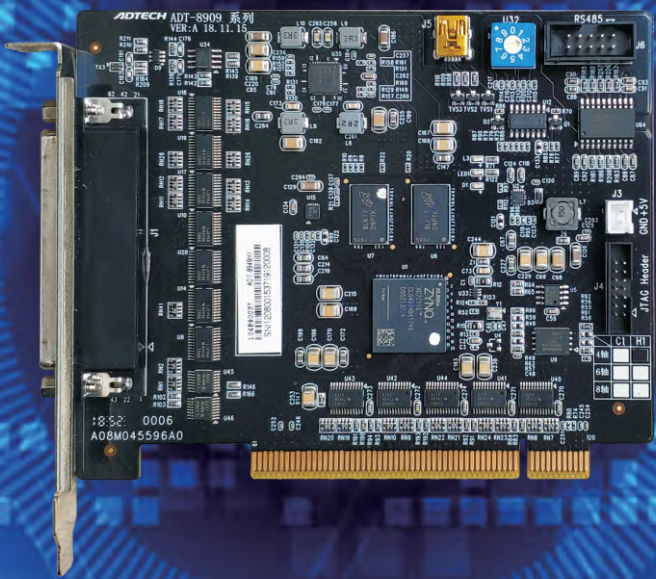
- ♦ machine vision and automatic detection equipment;
- ♦ industrial robot equipment;
- ♦ biological and medical automatic sampling equipment;
- ♦ 3C manufacturing industry: dispensing, AOI, SMT;
- ♦ carving equipment;
- ♦ advertising industry: CNC encircling machine;
- ♦ PCB processing and other industries;
- ♦ packaging and printing equipment: printing machine, pad printing machine;
- ♦ cutting equipment: diamond cutting machine, sponge cutting machine;



ADT-8909 HIGH PERFORMANCE

High-end tracks

High-speed control



High-tech frontiers

Standard and convenient

Selection Guide

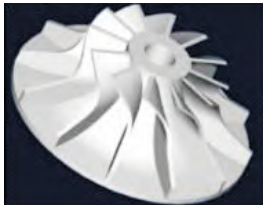
type		ADT-8909 series					
Model name		ADT-8949		ADT-8969		ADT-8989	
		C1	H1	C1	H1	C1	H1
Suitable occasion		Advanced point / track motion					
hardware configuration And performance	number of axes	4		6		8	
	Maximum pulse frequency	5M					
	Number of encoder shafts	4		6		8	
	Maximum feedback frequency of encoder	4M					
	Maximum input frequency of hand wheel	4M					
	ALM、RDY、INP、SVON	√					
	General digital input	46		48		50	
	General digital output	34		38		42	
	Signal filtering	√					
	Hardware emergency stop / limit	√					
Point control	Homing motion	√					
	JOG motion	√					
	Point movement	√					
	T type / S type / E type / C type acceleration and deceleration	√					
	Shifting / changing target position in motion	√					
	Master-slave following	√					
High speed IO control	High speed position comparison output	2					
	High speed latch	4		6		8	
	PWM control	2					
Trajectory control	Number of coordinate system groups	2					
	Number of cache instructions	10000 paragraph					
	Multi axis linear interpolation	√					
	2-axis arc interpolation	√					
	3-axis arc interpolation	√					
	Space arc / helix	—	√	—	√	—	√
	NURBS(spline) interpolation	—	√	—	√	—	√
	Speed lookahead / cache interpolation	—	√	—	√	—	√
	Cache IO events	—	√	—	√	—	√

Selection Guide

Advanced functions	4 axis linkage	√
	RTCP	√
	LUA Script	√
Other	DA	2
	Encryption function	√
	Software limit	√

Typical performance description

4-axis / 5-axis linkage



Impeller

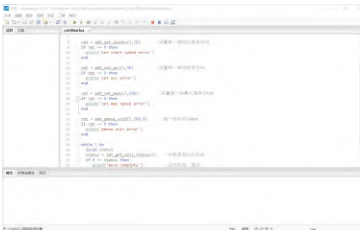


Crankshaft of large oil production machine



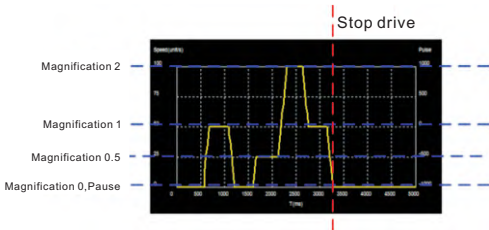
Marine propeller

Script programming



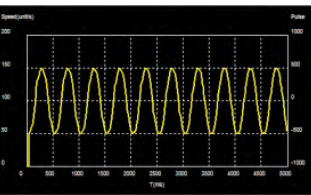
Powerful amstudio script programming software, programmable, It can be debugged, uploaded, downloaded and simulated.

Speed multiplying rate

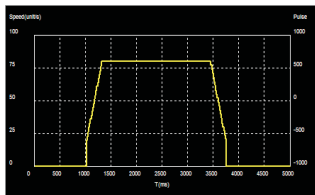


Speed foresight and cache interpolation

Speed foresight and cache interpolation complement each other, and large capacity cache space ensures high precision and high speed. The speed and trajectory of multi segment dense interpolation are automatically optimized and adjusted, the speed is smooth, and the vibration is weakened. High precision ensures high efficiency.



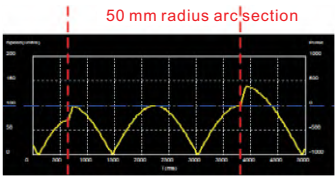
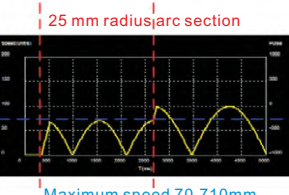
Standard multi segment non cache interpolation



Multi segment cache interpolation

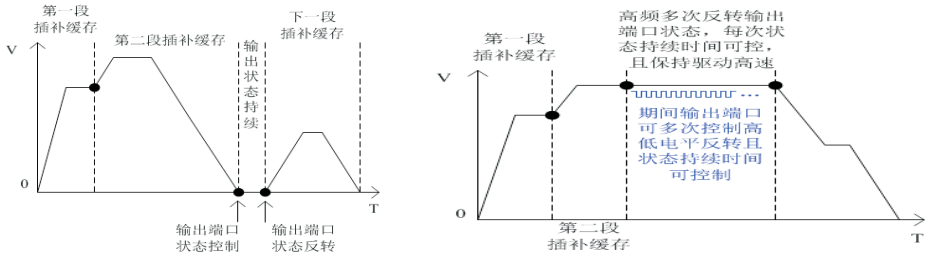
Circular interpolation speed constraint

When the cache interpolation is driven, the arc interpolation in the cache interpolation process can be further set freely. The speed constraint ensures smooth transition of arc interpolation in high speed and the advancement of speed and track. Step automatic optimization and adjustment. The constraint speed can be set freely.



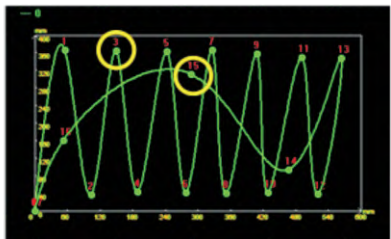
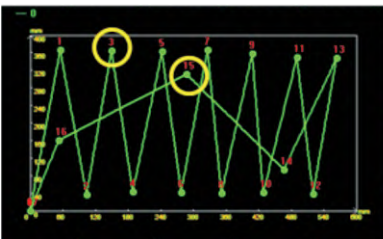
Cache IO events

It is widely used in IO control and pulse output generator of hardware level in the process of buffer interpolation of dispensing and flying racket.

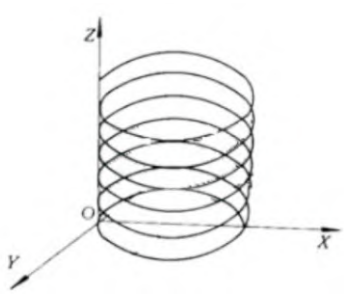
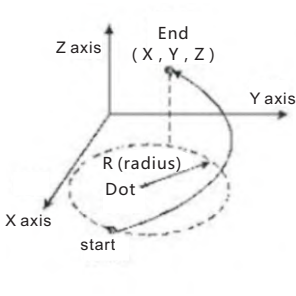
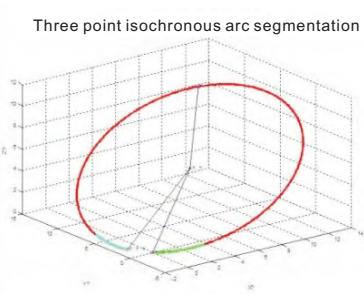


NURBS spline interpolation

It is widely used in IO control and pulse output generator of hardware level in the process of buffer interpolation of dispensing and flying racket.



Space spherical arc interpolation / space spiral interpolation



Product configuration

Product model	Name	Model description			Dimension parameter
ADT-8909	ADT-8949 ADT-8969 ADT-8989				135mm×110mm×1
	Terminal block ADT-9140 ADT-9160 ADT-9180				258mm×157mm×41.6mm×1
	Data transmission line ADT-D62GG				1.5M×1

AVS series vision definition system



AVS2300 (1-2 cameras)



AVS3200 (1-4 cameras)

Product introduction

The main function of the AVS series vision system is positioning. Using the self-developed host computer software ADT vision, you can quickly build your own vision positioning system by simply configuring a few parameters. And it can quickly return the positioning results to the PLC and various types of controllers through the most popular Ethernet, serial, Modbus and I / O interface output. It can be used in various industrial equipment and robot systems that require high-precision position information.

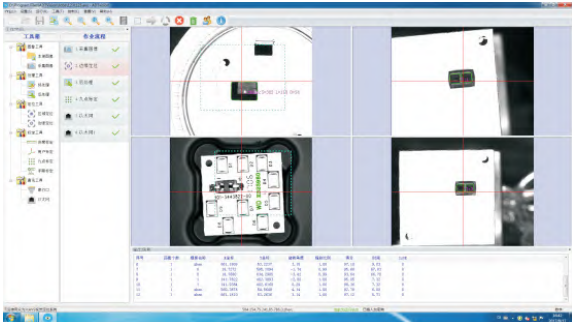
The entire system consists of two parts: hardware and software:
Hardware part: vision controller + camera + lens + light source + light source controller
Software part: ADT Vision software

Function introduction

- Support Gigabit Ethernet, USB and other cameras
- Support area scan CCD camera
- Provide 1 optocoupler isolated input, 1 optocoupler isolated output, 2 GPIO
- Support online or offline detection
- Support a variety of common communication interfaces such as RS232, Ethernet
- Comply with OPC standards

Software Features

- The image positioning algorithm used has high accuracy and strong stability
- Positioning algorithm can reach 1/64 pixel accuracy
- Support for multiple camera solutions
- Support multi-template positioning, can output multiple positioning results at the same time
- Cameras supporting different resolutions and interfaces
- Support offline design and verification of positioning schemes
- Provides a variety of positioning tools, which can output information such as position, rotation angle and zoom ratio
- Provide a variety of calibration tools, support automatic calibration, no need for calibration needle and calibration board
- Quickly build your own vision positioning system with a few simple steps
- Rich communication interface, support network, serial port, I / O interface
- Supports self-starting upon power-on, once configured can be done once and for all

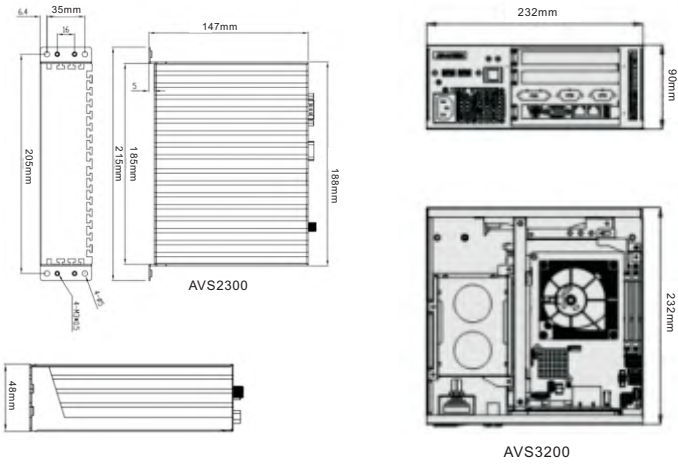


Working parameter

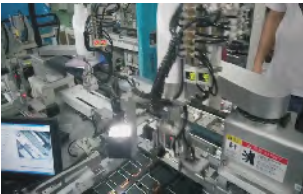
Model	AVS2300
processor	Intel@Celeron J1900,2.0GHz
RAM	2GB DDR3 Memory
Store	32G SATA Industrial HDD
Power supply mode	AC220V
Hardware state monitoring	Support power voltage and temperature detection
Display output	VGA
Operation method	USB mouse + keyboard
Serial output	1pc
USB interface	4pc
Network port	2 Gigabit Ethernet ports, 1 100M Ethernet port
Operating temperature	-5° C ~60° C
storage temperature	-40° C ~80° C
Working humidity	0%~90%

Model	AVS3200
processor	Intel@ Core i5-2400 3.1 GHz
RAM	4GB DDR3 Memory
Store	500G Industrial HDD
Power supply mode	AC220V
Hardware state monitoring	Support power voltage and temperature detection
Display output	VGA/HDMI
Operation method	USB mouse + keyboard
Serial output	4pc
USB interface	4pc
Network port	4 Gigabit Ethernet ports
Operating temperature	-20° C ~ 60° C
storage temperature	-40° C ~ 80° C
Working humidity	10% ~ 95%

Installation dimension



Applications:



Mobile phone FPC circuit assembly



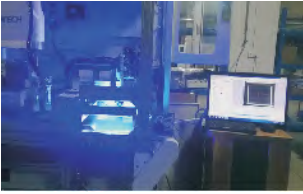
Vision Dispensing



Computer component assembly



Mobile phone labeling



Cosmetic loading and unloading



LED plug-in



food processing



Carton packaging industry

3-6 axis dispensing control system



DJ904V (3 and 4 axis drive and control)
 DJ8849V (3 and 4 axis)
 DJ1600V (6 and 6 axis)

- Number of controllable axes: 3-6 axes
- DJ904V (drive-control integrated) integrated stepper drive supports two-phase 42 or 57 open-loop stepper motors
- PLT, TCF, G code map
- Multiple processing methods
- Trajectories and corners can be optimized separately

Control function

- 2-6 axis interpolation, support for space straight line, space arc, space ellipse, spline curve
- Adopt speed look-ahead algorithm, automatic arc corner speed, and automatic corner turning point
- Support standard Modbus ASCII, Modbus RTU and Modbus TCP communication protocols
- Supports LUA script function designed to solve non-standard processes
- Supports rich processing instructions such as space shift, straight line, ellipse, spline curve, file call, and open user-defined instructions (customers can write specific instructions for specific instructions)
- Computer can import PLT files and G code files
- Image preview and real-time dynamic display processing track
- Multiple processing methods such as cycle processing, single processing, automatic processing, single-step processing, etc.
- File teaching and editing functions, providing advanced editing functions such as batch modification, array copying, graphic translation, graphic scaling, automatic rounded corners, etc., with common graphic libraries for customers to call.

IO

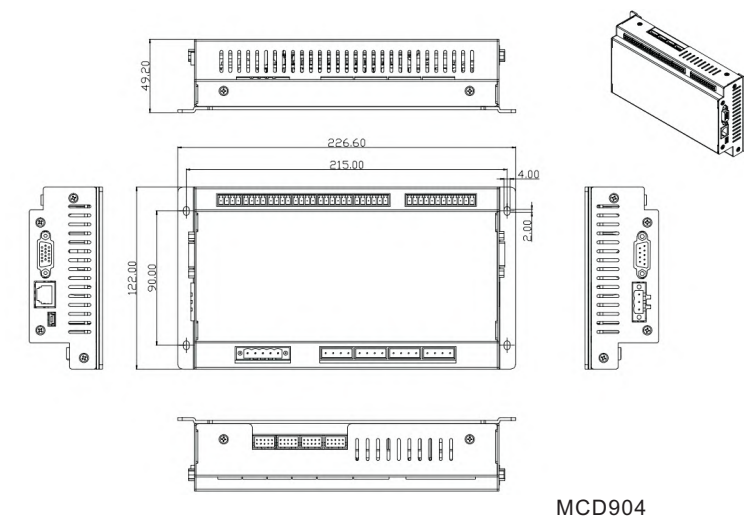
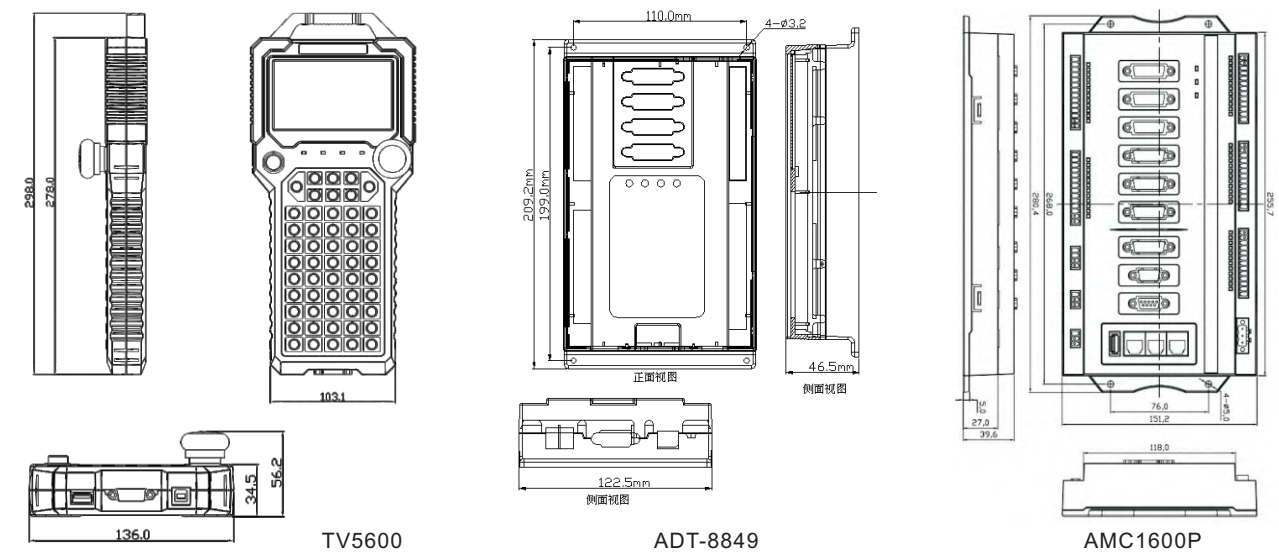
- Input type: all optocoupler isolation, NPN open collector 5-24VDC, rated current 0.5A, single channel maximum current can reach 1A
- Input type: all optocoupler isolation, input voltage: 12-24V
- Hardware positive and negative limit, origin and stop of each axis, start external button (limit input can be set to invalid as general input)

Application Environment

- Operating temperature: 45°C
- Storage temperature: -40°C — 55°C
- Working humidity: 40% — 80%
- Storage humidity: 0% — 95%

Size description

unit : mm



Application area



Electroacoustic industry

Inductance industry

Communications industry

Electronics industry

LED industry

4-6 axis vision dispensing control system



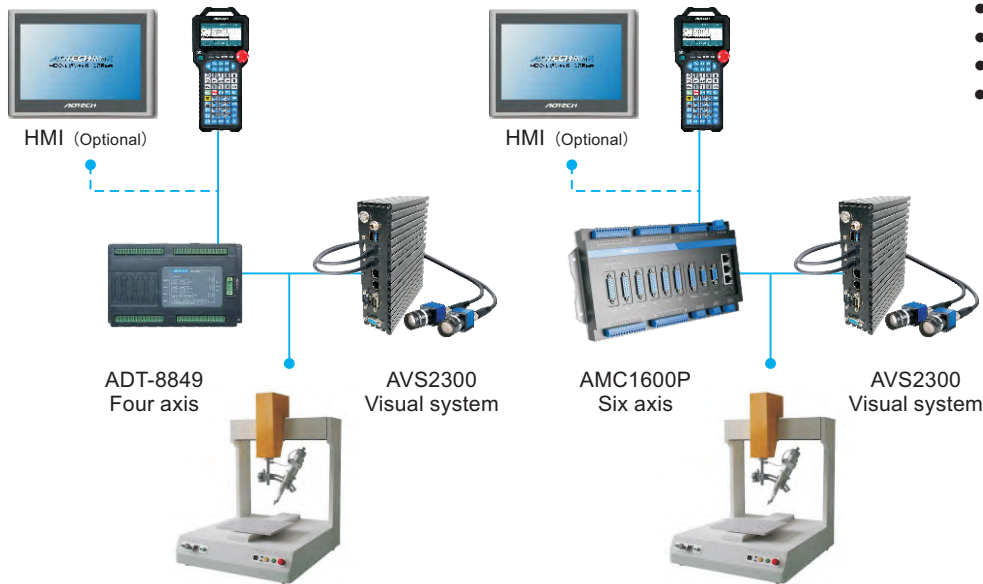
- Number of controllable axes: 4-6 axes
- Maximum pulse frequency
- Supports touch screen or handheld box
- Support visual positioning correction



Control function

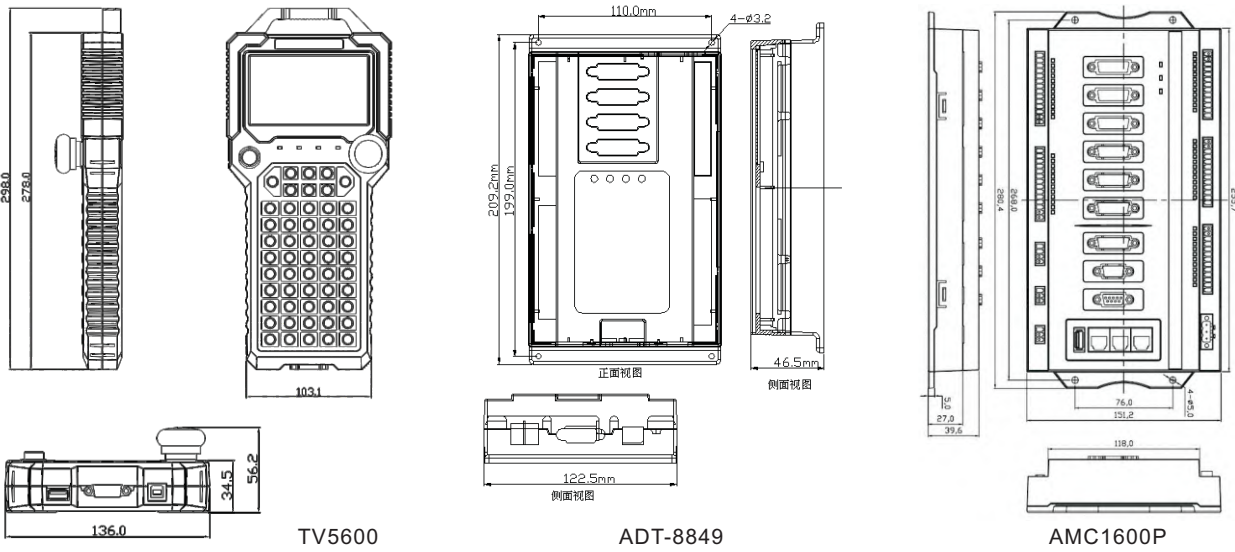
- 2-6 axis interpolation, support for space straight line, space arc, space ellipse, spline curve
- Adopt speed look-ahead algorithm, automatic arc corner speed, and automatic corner turning point
- Support standard Modbus ASCII, Modbus RTU and Modbus TCP communication protocols
- Supports LUA script function designed to solve non-standard processes
- Supports rich processing instructions such as space shift, straight line, ellipse, spline curve, file call, and open user-defined instructions
- Cooperate with vision, support camera teaching, needle teaching two modes
- Support multiple MARK points, multiple templates, can support up to 200 MARKs for independent correction
- Support visual one-click calibration to calculate pixel units
- Supports mechanical one-touch needle calibration, calculates the mechanical distance between the camera and the needle

Wiring diagram



Size description

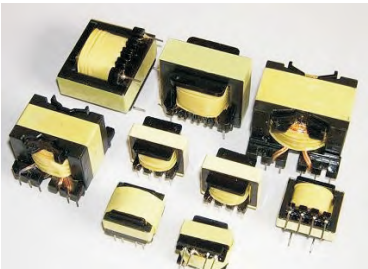
unit : mm



Application area



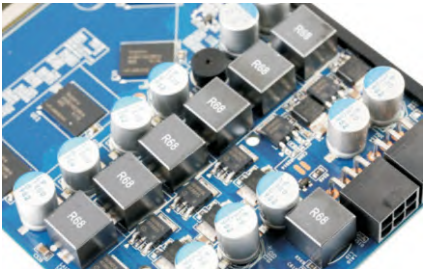
Electroacoustic industry



Inductance industry



Communications industry



Electronics industry



LED industry

2-4 axis hair planting machine control system (7 inch screen)



- ZM250 2 axis
ZM350 3 axis
ZM450 4 axis
- Number of controllable axes: 2-4 axes
 - Multiple acceleration and deceleration modes, high speed above 8 holes per second
 - Trace preview simulation
 - Hair planting machine complete auxiliary functions
 - More than 20 kinds of pattern templates
 - 18 outputs and 34 inputs

Control function

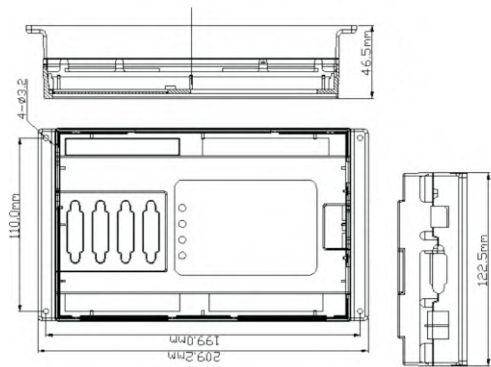
- 2-4 axis point motion, support interpolation
- Multiple acceleration and deceleration options: ladder type, S type, exponential type, cosine type, suitable for various occasions
- Hole position preview and real-time dynamic display processing path
- With foot pedal, automatic clamp opening, fixture detection, color change of electric eye, deceleration of color change in advance, two-step speed of the last hole, anti-collision at station switching, fluffing, multiple work options, electric eye feeding
- Various types of hair planting machine processes such as return-to-return axis setting, manual XA axis and YB axis linkage
- Multiple pattern template generation parameters, greatly reducing the time for teaching hole positions
- During editing: copying, splitting, panning, color measurement, insertion and deletion, and other operations facilitate data editing

IO

- Output type: all optocoupler isolation, open collector NPN 5-24VDC, rated current 0.5A
- Maximum single current up to 1A
- Input type: all optocoupler isolation, input voltage: 12-24V
- Hardware positive and negative limit, origin and stop of each axis, start external button (limit input can be set to invalid as general input)

Size description

unit : mm

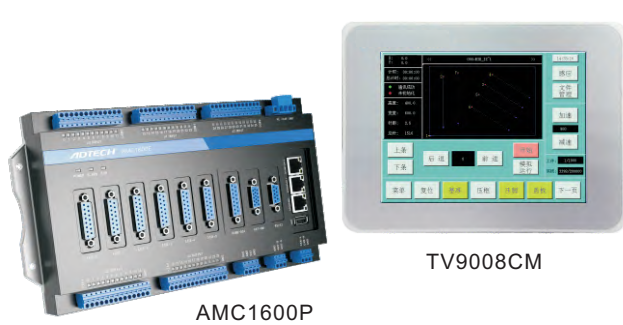


Application area

Hair transplant processing can be used to make various domestic and industrial brushes, such as toothbrushes, brooms, shoe brushes, toilet brushes, wooden brushes, wire brushes, etc.



High-performance 3-6 axis hair planting machine controller



- ZM360 3 axis
ZM460 4 axis
ZM560 5 axis
ZM660 6 axis
- Number of controllable axes: 3-6 axes
 - Multiple acceleration and deceleration modes
 - Trace preview simulation
 - Hair planting machine complete auxiliary functions
 - More than 20 kinds of pattern templates
 - 24 outputs and 36 inputs

Control function

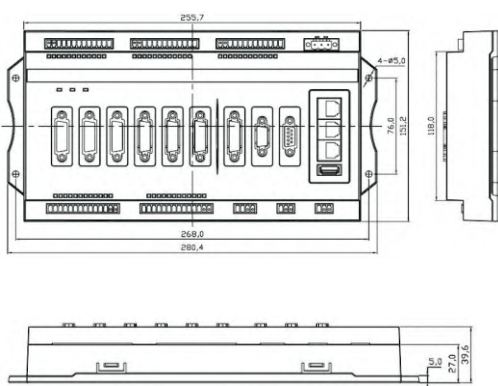
- 3-6 axis point motion, support interpolation
- Multiple acceleration and deceleration options: ladder type, S type, exponential type, cosine type, suitable for various occasions
- Hole position preview and real-time dynamic display processing path
- With foot pedal, automatic clamp opening, fixture detection, color change of electric eye, deceleration of color change in advance, two-step speed of the last hole, anti-collision at station switching, fluffing, multiple work options, electric eye feeding
- Various types of hair planting machine processes such as return-to-return axis setting, manual XA axis and YB axis linkage
- Multiple pattern template generation parameters, greatly reducing the time for teaching hole positions
- During editing: copying, splitting, panning, color measurement, insertion and deletion, and other operations facilitate data editing
- 2 DA outputs
- Supports various types of handheld boxes (ZM5B for 9-frame serial communication, ZM5A handwheel, external homemade input handheld box)

IO

- Output type: all optocoupler isolation, open collector NPN 5-24VDC, rated current 0.5A
- Maximum single current up to 1A
- Input type: all optocoupler isolation, input voltage: 12-24V
- Hardware positive and negative limit, origin and stop of each axis, start external button (limit input can be set to invalid as general input)

Size description

unit : mm



Application area



CNC milling machine control system



Split-controller

CNC9810-B
Pulse controller support 5(pulse axes)+ 1 (servo spindle)
CNC9810E-B EtherCAT controller, support up to 12 axis



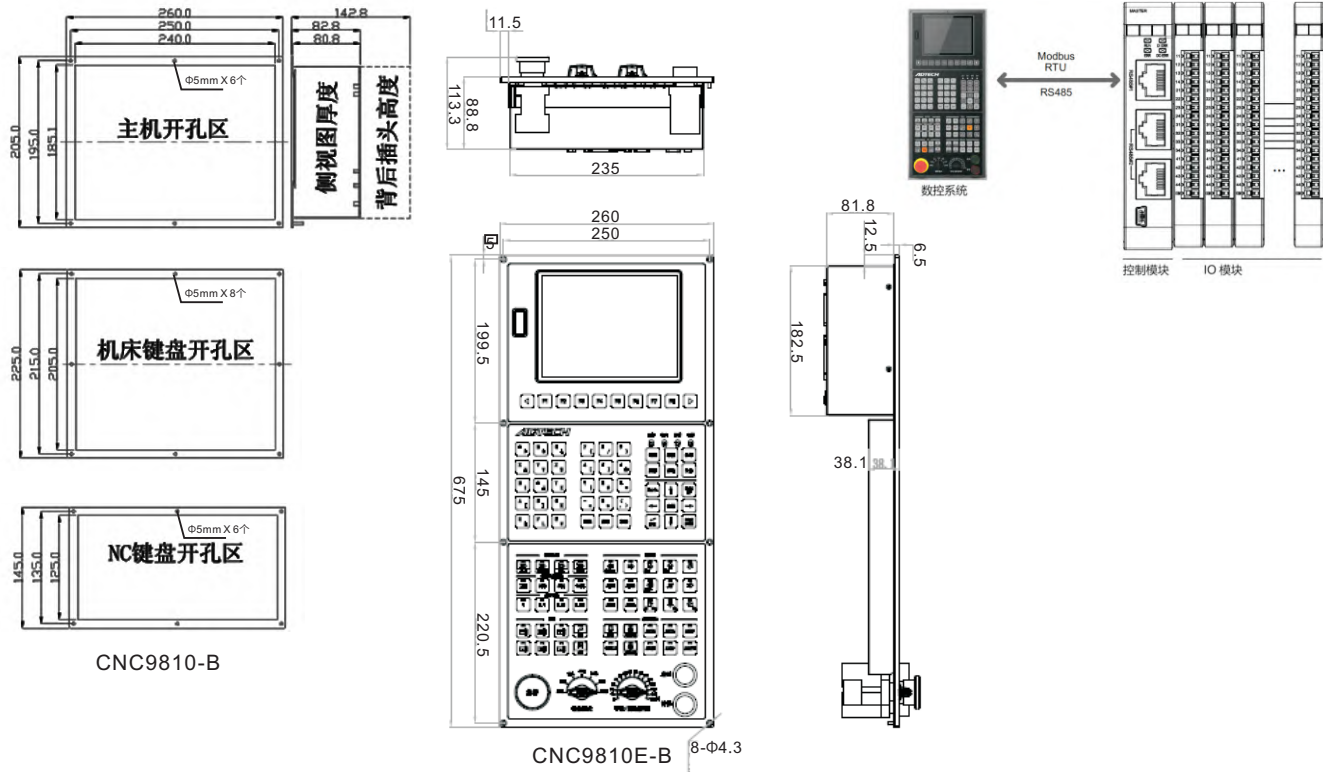
one-piece-controller

CNC9810E-C01
EtherCAT controller, support up to 12 axis.

Function Specification

Model	specification	9810-B01	9810E-C01
CPU	High-performance dual-core processor	standard	standard
Running memory	DDR	512M	512M
Electronic hard drive	EMMC	8GB	8GB
Servo axes	pulse	5+1	5+1
	bus	Up to 12 axis	Up to 12 axis
IO	Input	24	24
	Output	24	24
Internet	External network interface	EtherNet	无
Bus	RS485	Standard	Standard
	EtherCAT	Empty	Standard
Hand wheel	Hand wheel box	Standard	Standard
Analog quantity	0-10V DAC 12bit	Standard	Standard
Extension axes	Control axe	Fixed up to 6 axis	Parameter configuration up to 12 axis
USB interface	Moving storage	USB2.0	USB 2.0
Optional software package	RTCP	Optional	Standard
IO Extension	Input/Output extension	RS485 bus	RS485、EtherCAT

Dimension figure (Unit:mm)



Product configuration

Name	model	description	
The standard configuration	CNC Milling Controller	CNC9810-B/CNC9810E-B	CNC milling machine control system
	Additional panel	FCNC910V	Operational panel
	Additional panel	FCNC910P	Programming keyboard
The optional configuration	Hand wheel box	ADT-CNC4A	4 axis hand wheel box
	Hand wheel box	ADT-CNC6A	6 axis hand wheel box
	Splitter	ADT-9143	RS232 convert to 485 communication module
	Input Splitter	ET102A	485 bus input module
	Output Splitter	ET202A	485 bus output module
Servo driver	ADTECH(QX series) Servo Driver		
motor	ADTECH(QXS series) Servo motor		

Name	model	description
Bus controller	CNC9810E	Bus CNC control system(a whole set)
The optional configuration	ADT-CNC4A	4 axis Hand wheel box
	ADT-CNC6A	6 axis Hand wheel box
	ADT-9143	RS232 convert to 485 communication module
	ET102A	485 bus input module
	ET202A	485 bus output module
	ET1616A	EtherCAT bus 16 input/16 output

High-performance 6 axis CNC milling machine control system



CNC9960 (6 axis)

Function Specification

- Nano-scale interpolation accuracy;
- Support many kinds of communication methods, like USB, U disk, RS232COM,etc. Easy to help users achieve different data transmission requirements and software upgrades;
- With a network interface, support for remote monitoring and DNC file transfer processing;
- An open platform, according to customer's demand for customized special plane system;
- Perfect self-diagnosis function, internal and external state of real-time display,alarm immediately if abnormal;
- Support external additional panel, hand wheel box operation, convenient for the customer tools changing ;
- Macro variables, macro definition programming, for a variety of logic relations. Support with parameters of macro program invocation, the user more convenient programming;
- High speed intelligent speed pretreatment processing, processing stability;
- With RS485 expansion bus, support IO peripheral expansion;
- Use international standard G code, with large storage space, support multi file and large file processing and storage;
- Support powerful B macro analysis function , to facilitate users to develop their own motion control program;
- As many as 2000 segments of the forward and trajectory smoothing algorithms, support for NURBS spline interpolation;
- Power save function, password protected screen saver function etc;
- DXF + G code template graphic analysis;
- 3D graphics simulation function.

Parameter table

Input and output address arbitrarily set, only need to address bar to fill in the corresponding data in the configuration table.

组合参数	单位	出厂	修改	地址	注释
0001 系统版本号		0.01	0.01	0001	系统版本号
0002 系统日期		2008.08.01	2008.08.01	0002	系统日期
0003 系统时间		08:00:00	08:00:00	0003	系统时间
0004 系统语言		CHN	CHN	0004	系统语言
0005 系统单位		MM	MM	0005	系统单位
0006 系统精度		0.001	0.001	0006	系统精度
0007 系统报警		0000	0000	0007	系统报警
0008 系统速度		1000	1000	0008	系统速度
0009 系统加速度		100	100	0009	系统加速度
0010 系统减速度		100	100	0010	系统减速度
0011 系统进给		100	100	0011	系统进给
0012 系统冷却		1000	1000	0012	系统冷却
0013 系统润滑		1000	1000	0013	系统润滑
0014 系统排屑		1000	1000	0014	系统排屑

Multi-interface options

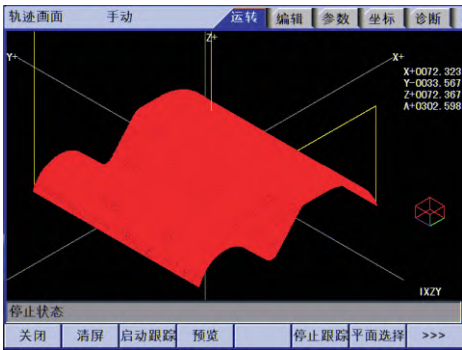
Support multi-language interface display, automatic fault alarm, rich in processing information display, processing time, number of pieces.

组合参数	单位	出厂	修改	地址	注释
0001 系统版本号		0.01	0.01	0001	系统版本号
0002 系统日期		2008.08.01	2008.08.01	0002	系统日期
0003 系统时间		08:00:00	08:00:00	0003	系统时间
0004 系统语言		CHN	CHN	0004	系统语言
0005 系统单位		MM	MM	0005	系统单位
0006 系统精度		0.001	0.001	0006	系统精度
0007 系统报警		0000	0000	0007	系统报警
0008 系统速度		1000	1000	0008	系统速度
0009 系统加速度		100	100	0009	系统加速度
0010 系统减速度		100	100	0010	系统减速度
0011 系统进给		100	100	0011	系统进给
0012 系统冷却		1000	1000	0012	系统冷却
0013 系统润滑		1000	1000	0013	系统润滑
0014 系统排屑		1000	1000	0014	系统排屑

组合参数	单位	出厂	修改	地址	注释
0001 系统版本号		0.01	0.01	0001	系统版本号
0002 系统日期		2008.08.01	2008.08.01	0002	系统日期
0003 系统时间		08:00:00	08:00:00	0003	系统时间
0004 系统语言		CHN	CHN	0004	系统语言
0005 系统单位		MM	MM	0005	系统单位
0006 系统精度		0.001	0.001	0006	系统精度
0007 系统报警		0000	0000	0007	系统报警
0008 系统速度		1000	1000	0008	系统速度
0009 系统加速度		100	100	0009	系统加速度
0010 系统减速度		100	100	0010	系统减速度
0011 系统进给		100	100	0011	系统进给
0012 系统冷却		1000	1000	0012	系统冷却
0013 系统润滑		1000	1000	0013	系统润滑
0014 系统排屑		1000	1000	0014	系统排屑

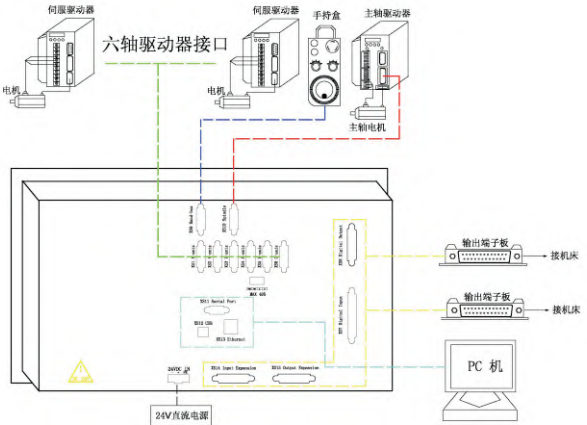
Graphic simulation function

Display graphic as well as the tool movement trajectory of the actual operation of the machining program, real-time tool path simulation during machining, inspection of machine program is correct.



Easy installation

Reliable structure, all interface are standard DB connector.



Additional Accessories



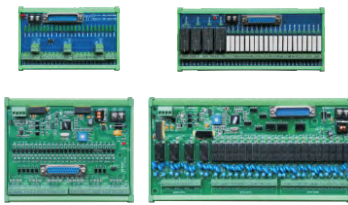
Hand wheel box



Additional Panel

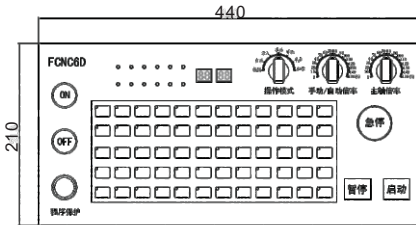
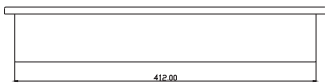
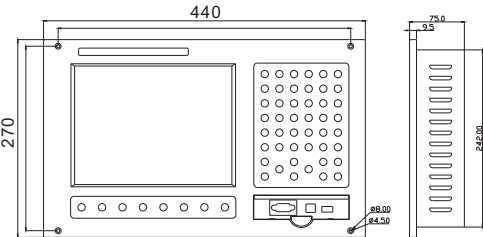


Servo, Stepper Unit



Input/Output Splitter

Dimension figure (Unit:mm)



Product configuration

Product model	Product match	Description
CNC9960	Servo driver	ADTECH(QXM series)servo driver
	motor	ADTECH(QXS series)servo motor

CNC lathe/milling machine control system



CNC 9620 (2 axis)
Popular 2 axis lathe CNC controller



CNC9640 (4 axis)
Popular 4 axis milling CNC controller



CNC9650 (5 axis)
5 axis milling CNC controller

Function Specification

- Nano-scale interpolation accuracy;
- Can be configured according to different user needs stepping, servo driver, to achieve cost performance;
- Support many kinds of communication methods, like USB, U disk, RS232COM,etc. Easy to help users achieve different data transmission requirements and software upgrades;
- With a network interface, support for remote monitoring and DNC file transfer processing;
- An open platform, can be customized according to customer's requirements;
- Effect self-diagnosis function, internal and external state of real-time display,alarm immediately if abnormal;
- Support external additional panel, hand wheel box operation, convenient for the customer tools changing ;
- Macro variables, macro definition programming, for a variety of logic relations. Support with parameters of macro program invocation, the user more convenient programming;
- DXF + G code template function, the DXF automatically converted to G code processing;
- Multiple automatic tool setting methods such as automatic centering and tool setting;
- The teaching function: teaching +RISC programming, using tabular teaching mode, the teaching method is simple,intuitive;
- With communication macro instruction, can read MODEBUS bus peripheral data;
- Support absolute servo systems, the system does not need to return to zero;
- Support Chinese and English, and provide dictionary files. Users can translate into other languages by themselves;

Parameter table

Input and output address number can be set arbitrarily. Only the corresponding value needs to be filled in the address column of configuration table.

综合参数	启动模式	名称	程序	参数	单位	说明
001 大轴坐标轴单位	1	013 大轴坐标轴速度 (mm/min)		100		
002 大轴坐标轴单位	1	014 大轴坐标轴速度 (mm/min)		100		
003 大轴坐标轴单位	1	015 大轴坐标轴速度 (mm/min)		100		
004 大轴坐标轴单位	1	016 大轴坐标轴速度 (mm/min)		100		
005 大轴坐标轴单位	1	017 大轴坐标轴速度 (mm/min)		1000		
006 大轴坐标轴单位	1	018 大轴坐标轴速度 (mm/min)		1000		
007 大轴坐标轴单位	1	019 大轴坐标轴速度 (mm/min)		1000		
008 大轴坐标轴单位	1	020 大轴坐标轴速度 (mm/min)		1000		
009 大轴坐标轴单位	3000	021 大轴坐标轴速度 (mm/min)		9999.999		
010 大轴坐标轴单位	3000	022 大轴坐标轴速度 (mm/min)		9999.999		
011 大轴坐标轴单位	3000	023 大轴坐标轴速度 (mm/min)		9999.999		
012 大轴坐标轴单位	3000	024 大轴坐标轴速度 (mm/min)		9999.999		

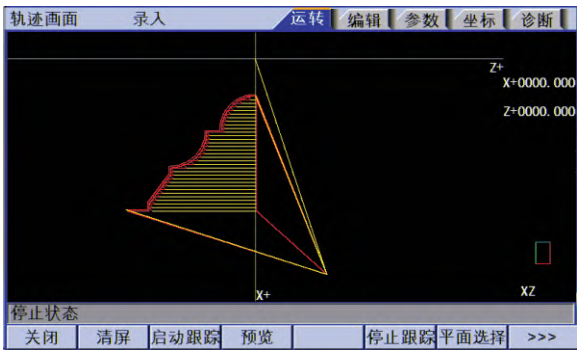
Multi-interface options

Support multi-language interface display, automatic fault alarm, rich in processing information display, processing time, number of pieces.

程序编辑	名称	程序	参数	单位	说明
00001					
00002	X15.87 Y-2.750				
00003	X15.810 Y-2.721				
00004	X15.780 Y-2.691				
00005	X15.750 Y-2.661				
00006	X15.720 Y-2.631				
00007	X15.690 Y-2.601				
00008	X15.660 Y-2.571				
00009	X15.630 Y-2.541				
00010	X15.600 Y-2.511				
00011	X15.570 Y-2.481				
00012	X15.540 Y-2.451				
00013	X15.510 Y-2.421				
00014	X15.480 Y-2.391				
00015	X15.450 Y-2.361				
00016	X15.420 Y-2.331				
00017	X15.390 Y-2.301				
00018	X15.360 Y-2.271				
00019	X15.330 Y-2.241				
00020	X15.300 Y-2.211				
00021	X15.270 Y-2.181				
00022	X15.240 Y-2.151				
00023	X15.210 Y-2.121				
00024	X15.180 Y-2.091				
00025	X15.150 Y-2.061				
00026	X15.120 Y-2.031				
00027	X15.090 Y-2.001				
00028	X15.060 Y-1.971				
00029	X15.030 Y-1.941				
00030	X15.000 Y-1.911				

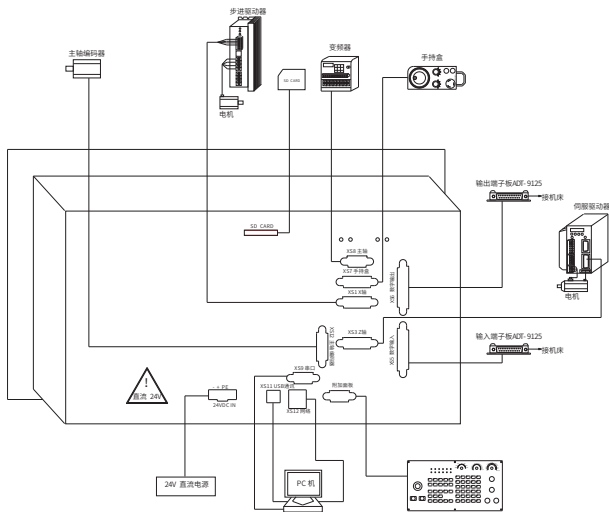
Graphic simulation function

Display graphic as well as the tool movement trajectory of the actual operation of the machining program, real-time tool path simulation during machining, inspection of machine program is correct.



Easy installation

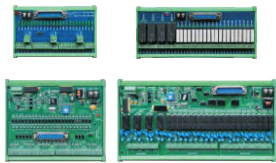
Reliable structure, all interface are standard DB connector.



Additional Accessories



Hand wheel box



Input/Output Splitter

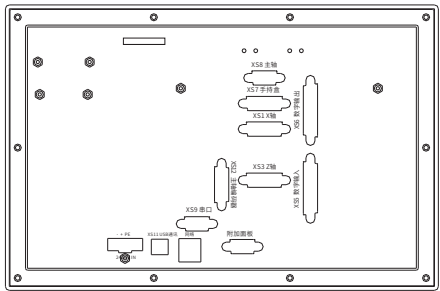
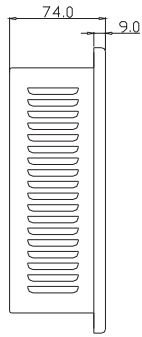
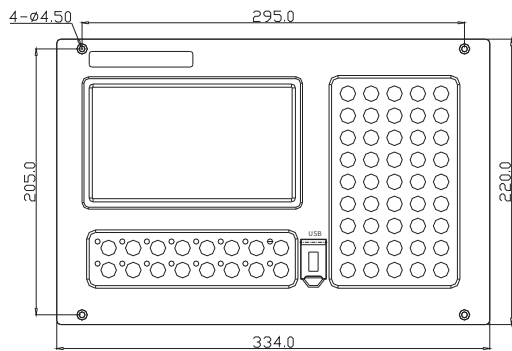


Servo, Stepper Unit



Additional Panel

Dimension figure (Unit:mm)



Product configuration

Product model	Product match	Description
CNC9620	Servo driver	ADTECH(QXM series)servo driver
CNC9640	motor	ADTECH(QXS series)servo motor
CNC9650		

12-axis spring machine control system



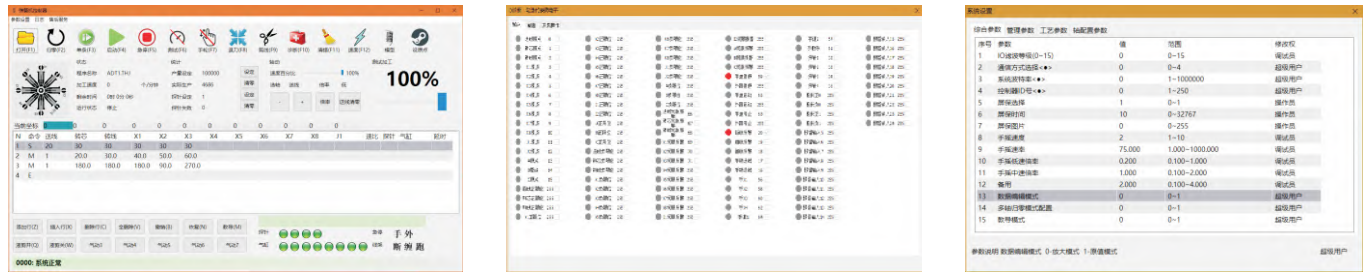
TH1200A-A01 series

- Number of controllable axes: 6-12 axes
- Controllable models: 12-axis universal spring machine, 6-axis compression spring machine, 7-12 axis forming machine
- EtherCAT bus control
- Supports 4 sets of probes
- Support wire feed wire entanglement, disconnection, running alarm detection
- Wire frame acceleration output function

Control function

- The system adopts AMC1600E + PC split control scheme, which is mature and stable
- Supports 12-axis (expandable up to 16-axis) EtherCAT bus control and 6-axis optional pulse control
- Support 12-axis universal spring machine, 6-axis compression spring machine, 7-12 axis forming machine
- Supports remote operation (can be remotely monitored or remotely updated after connecting to the Internet)
- Support 12-axis handheld box
- Support mouse, keyboard, universal display (can support touch screen)
- The upper computer graphic interface adopts WINDOWS style, which is beautiful and generous
- Upper and lower computers use network communication (optional serial communication), stable and rapid transmission
- Support 36 inputs (including 4 probes), 24 outputs
- Provide multi-level rights management, parameter cross-version backup and restore, and facilitate equipment maintenance and upgrade
- Support handwheel, test processing, easy editing and debugging
- Tabular programming, support teaching input, programming is simple and fast
- Supports wire feed frame entanglement, running, broken alarm detection
- Support IO port, free level configuration
- Support multiple languages, language packs can be translated by customers

Software interface

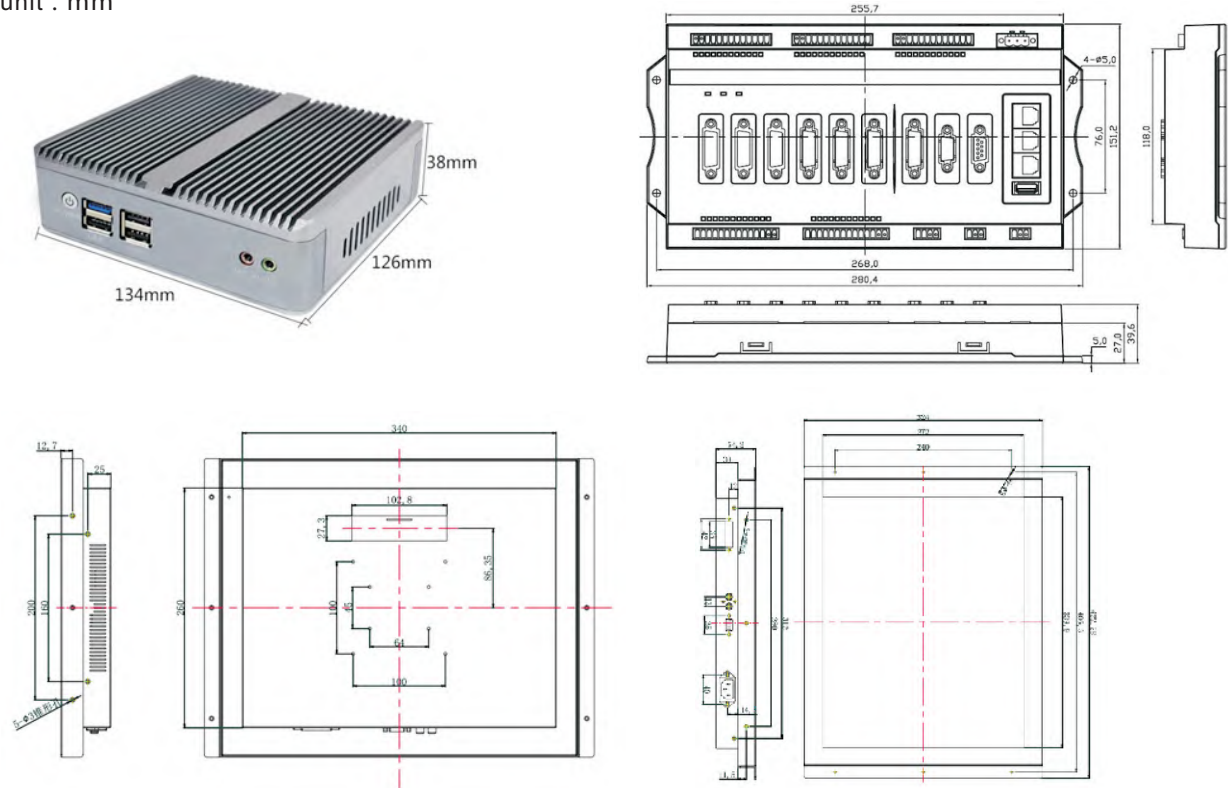


Product configuration

Item Name	Description	Quantity	Note
Controller	AMC1600E	1 Piece	Standard
PC industrial computer	Industrial computer	1 Piece	Standard
monitor	With touch	1 Piece	Standard
Handheld box	TH120A-A01	1 Piece	Standard
cable	Data transmission line (5 meters)	1 article	Standard

Size description

unit : mm



Optional accessories



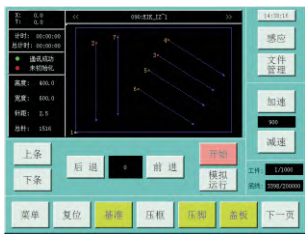
Full automatic template control system



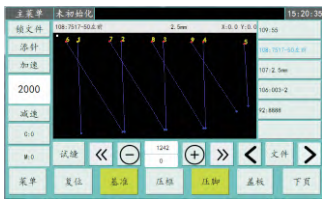
Function Specification

- μm level interpolation precision, high positioning accuracy;
- Using special template-making software, can read the PLT/DXF processing files,easily convert various machining trajectories;
- Can choose 8-inch or 7-inch color touch human-machine interface, intuitive operation, fast and convenient, easy to understand and learn the interface;
- Support Chinese, English and Vietnamese, etc, can add other languages according to customer's requirements ;
- Support U disk to quickly import and export patterns, and can quickly upgrade the operating system;
- With rich parameter management, trial encryption, functional encryption, production timing, counting and other management capabilities;
- Supports stepper motor thread trimming function and motor presser foot function, processing on different thickness fabrics is more stable and more efficient;
- Support laser cutting, brush and other functions, improve the degree of machine automation, save process and manpower;
- Complete operation code instruction set, easily achieve various process requirements;
- Powerful manual patterning function, easy to edit and modify various processing graphics;
- Supports benchmark-free function, making operation easier and more efficient;
- One-stop solution, can provide a full range of control, man-machine, drive, motor products.

Interface introduction

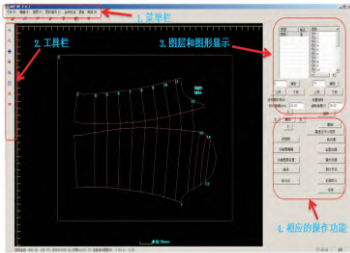


TV9008 main interface



TV7001 main interface

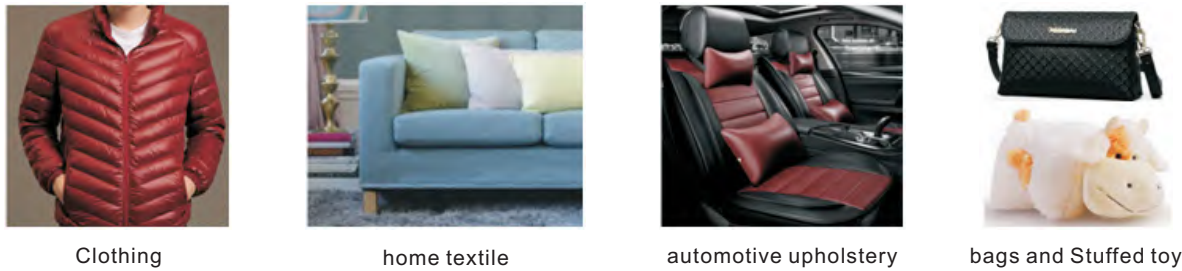
Import graphics, click the button, you can automatically specify the processing graphics.After the new employee completes the operation training, he can operate multiple automatic template machines.



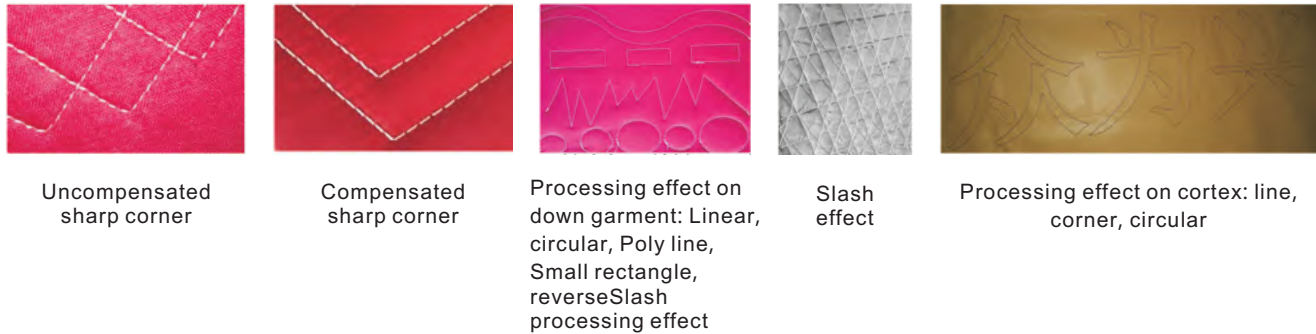
Template making software main interface

The software can recognize the graphics of DXF/PLT and other formats exported by AutoCAD/CoreIDRAW and other drawing software, which is convenient to convert various processing trajectories.

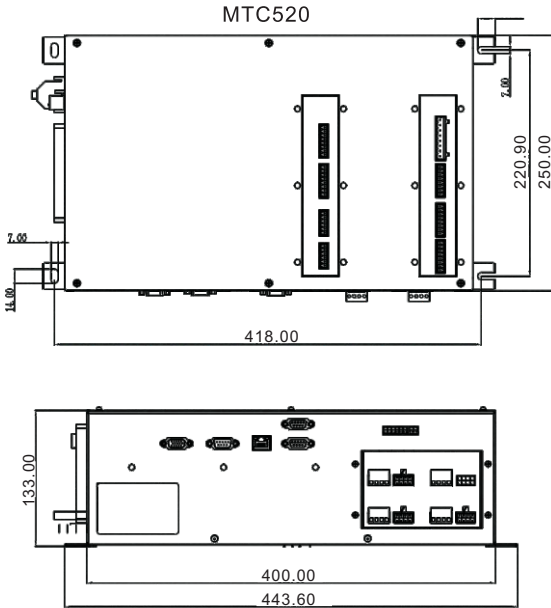
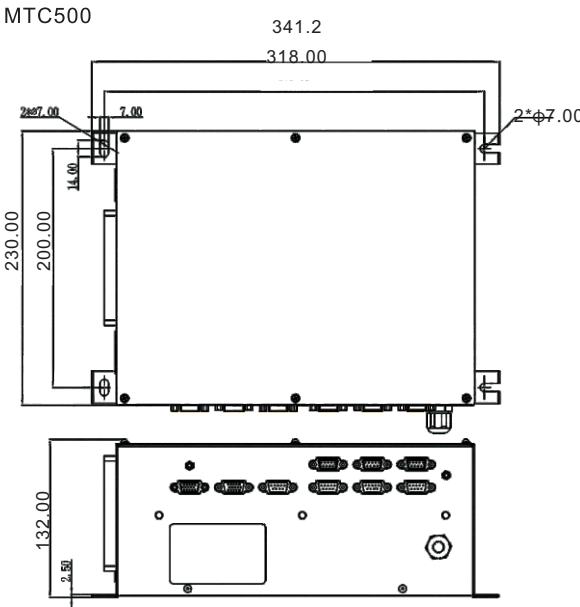
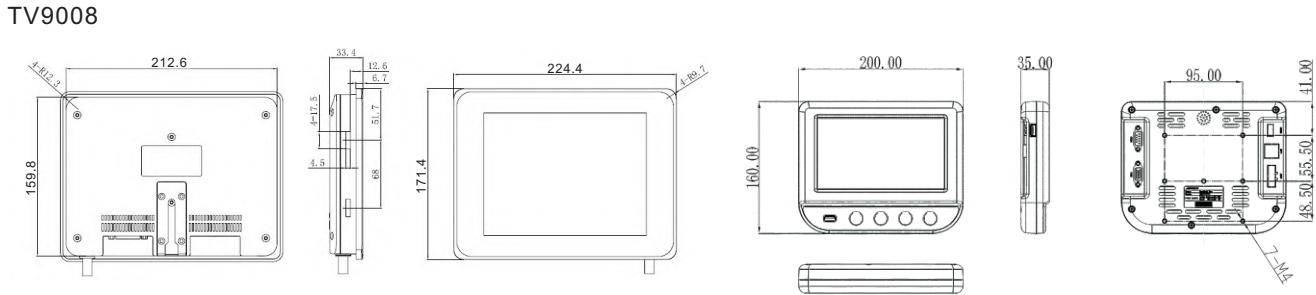
Application



Processing effect



Installation size(Unit:mm)



SCARA Robot control system



- QC400A
- control axes : 4 axis
 - Line interpolation,arc interpolation;
 - Continuous trajectory, trajectory follows;
 - All kinds of acceleration and deceleration;
 - Easy operation and simple programming ;
 - Driver and control all-in-one machine, save wires,spaces and cost;

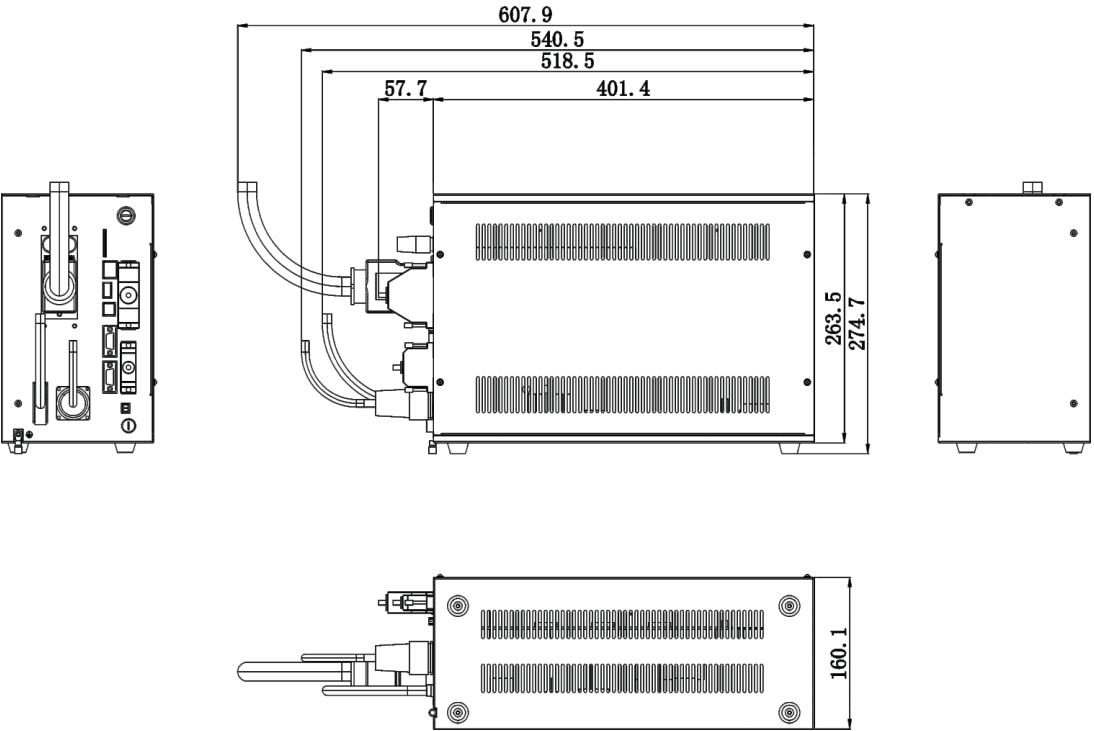
Basic specifications

Model			QC400A	Driver and control all-in-one machine	Program environment		AR language	
					Storage method		U disk, SD card	
Teach Pendant	Display		8 Inch		Standard IO	I/O input	34 channel	
	Teaching method		Data input by manual (coordinate value input) Cartesian coordinate teaching, offline teaching (Input data outside)			I/O output	27 channel	
					Output communication	RS-232	3 channel	
						Ethernet	1 channel	
	LVDS port	1 channel						
	Tracking program input		AR language		USB (2.0)	2 channel		
	Data cable		3M			Basic specification	Output size	400mmx260mmx160mm(controller)
	Size/weight		355mmx248mmx70mm (teaching dependent) /about 2KG				Weight	10KG
	Power supply		24V DC		Power cable		3 M	
Data exchange method		USB	Power supply		220V AC			
			Working temperature		0~40 degree			
			Working humidity	Under 90% RH				
			Storage temperature	-10~65 degree				
Driver and control all-in-one machine	Axis control function	Control axis	4 axis	8K/16K				
		Position control period						
		Movement/Servo control function	Arch movements, Linear interpolation, arc interpolation, continuous tracking, all kinds of acceleration and deceleration					
		Coordinate system	Joint coordinate system, Cartesian coordinate system					
		Position unit setting	Degree, mm					
		Off line movement	Full absolute position control(not need homing original point)					

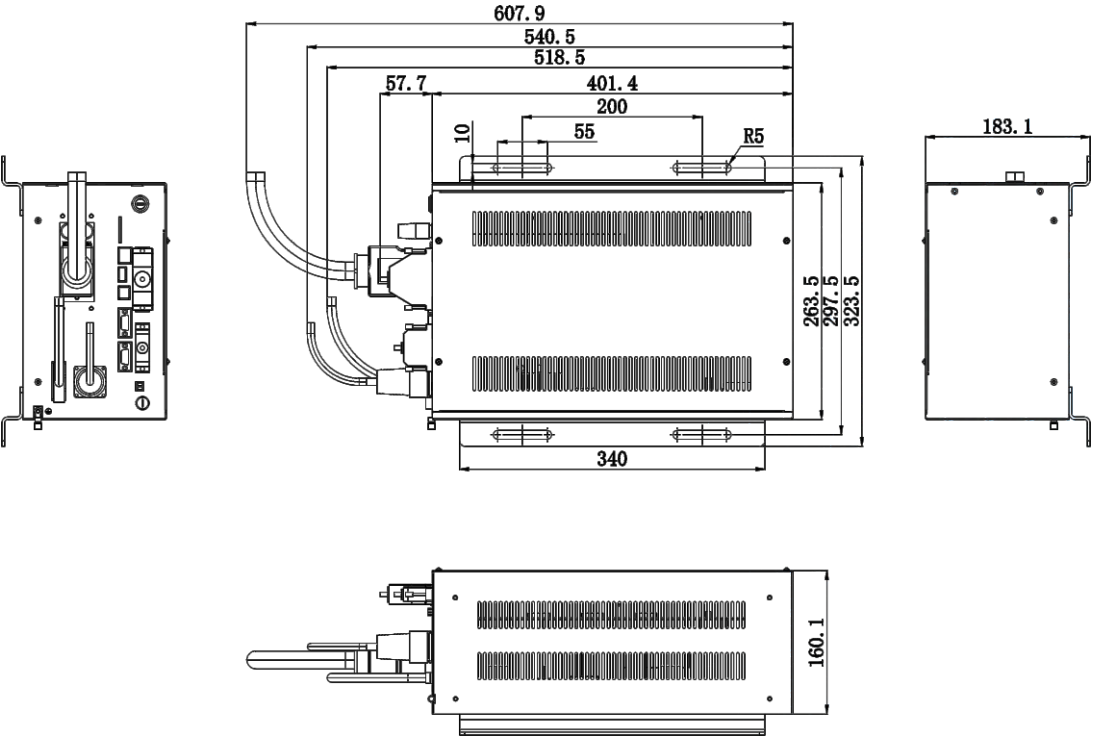
Product configuration

Model		QC400A	
Teach Pendant		ADT-RPB06(8 inch touch+ button color screen)	
Supported motor types	ADTECH(QXS series)	Motor power: 100W-1000W(no brake), 100W-750W(with brake)	
	Tamagawa	Motor power: 100W-1000W(no brake), 100W-750W(with brake)	
	Panasonic	Motor power: 100W-1000W(no brake), 100W-750W(with brake)	
Supported encoder types		Multiturn absolute, singleturn absolute	

QC400A output size dimension figure- with Foot Pad (Unit:mm)



QC400A output size dimension figure- with Mounting plate (Unit:mm)



SCARA Robot control system
QC410



High performance

- CPU performance up 67%, memory up 100%, hard drive up 700%
- Dynamic algorithms with intelligent optimum acceleration, beats increase by 5% on average and critical component life increases by an average of 10%
- Vibration suppression algorithm upgrade, track accuracy increased by 10% on average, stop stabilization time is shortened by 30% on average, and accuracy in place is higher

Usable

- 43% less weight, 27% reduction in volume, more convenient handling and installation;
- Mark 3 Ethernet ports for device networking
- PC-based software AR Studio programming and control

Scalability

- Software AR Studio offers scalability, functionality and flexible expansion of the process library.
- Supports secondary development based on modbus protocol to control robot motion and monitor robot status
- Support for EtherCAT protocol, expandable external additional axis

Product Basic Specification

Model		QC410B	External Memory Support		USB flash drive
Available robot		AR/GR/FRSeries SCARA	Emergency stop mode		Hardware emergency stop
Programming environment	Programming	AR language	Standard IO	IO Input	34
	Multi-threads	Max 10 threads		IO Output	27
	Individual program point capacity	3000	Basic specification	External Dimension	345mm*234mm*150mm
	Program capacity	1GB		Weight	7.45kg
	Maximum step of the program	10000		Power cables	1.5m
External communication	EtherCAT	1		Power specification	AC200V—AC240V,50Hz/60Hz
	Ethernet	3		Power consumption	3000VA
	RS-485	1	Apply temperature	-5~50℃	
	RS-232	2	Apply humidity	90%RH	
	USB (2.0)	1	Save temperature	-30~70℃	
Axis control function	Control axis number	4	Optional controls	Hand-held pendant	ADT-RPB07
	Position control cycle	8K		PC software	ARStudio
	Motion track control function	Point-to-point motion, Arch motion, Linear track, Arc Track, Ssing curve trajectory, Smooth transitions and various types of deceleration			
	Coordinates	Joint coordinate system, World coordinate system, Tool coordinate system, User coordinate system			
	Position unit setting	mm			
	Acceleration and Deceleration speed settings	Set according to Acceleration and Deceleration speed settings/automatically based on load weight and inertia			
	Offline motion	Complete absolute position control (no return point required)			

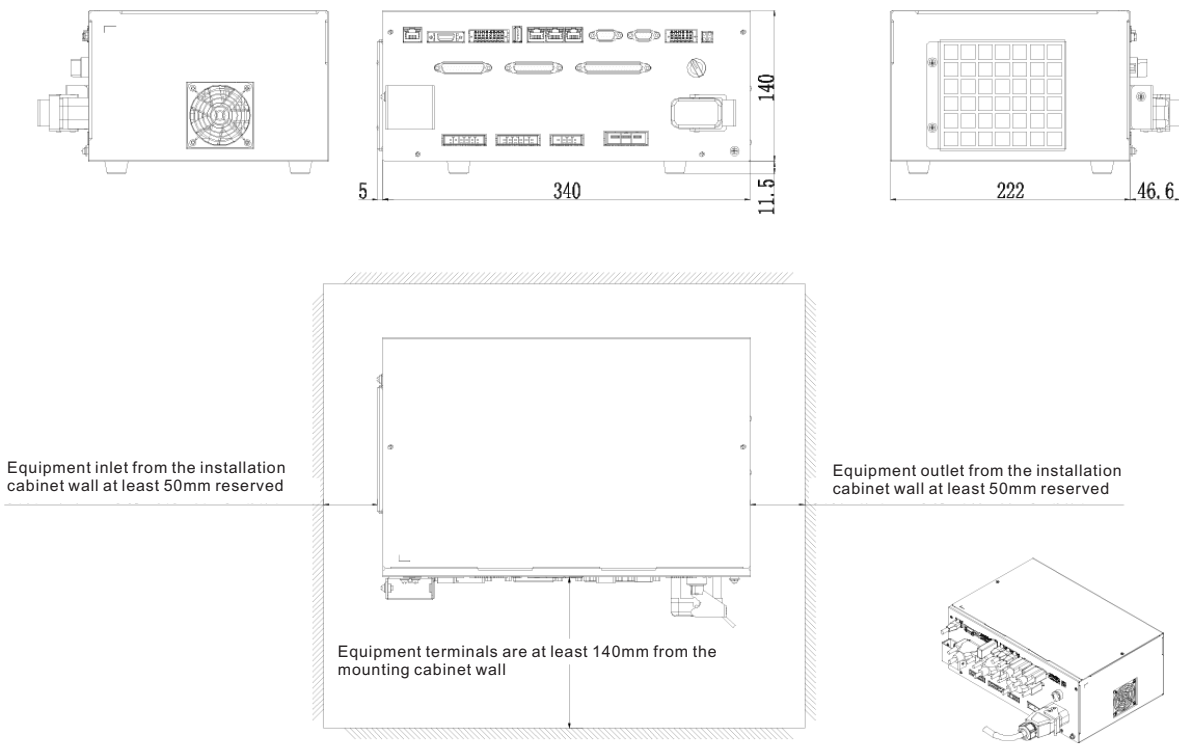
Teacher specification table (optional)

Model	ADT-RPB07	Display	8 inch color screen	Teaching methods	Dot-on teaching,Drag and teach,Fill in/external input
Data lines	5M/10M	Size/Weight	355mm*248mm*70mm / 2kg	Power	24V DC
How to communicate	Ethernet	How to use it	Touch/Key	How to exchange data	USB

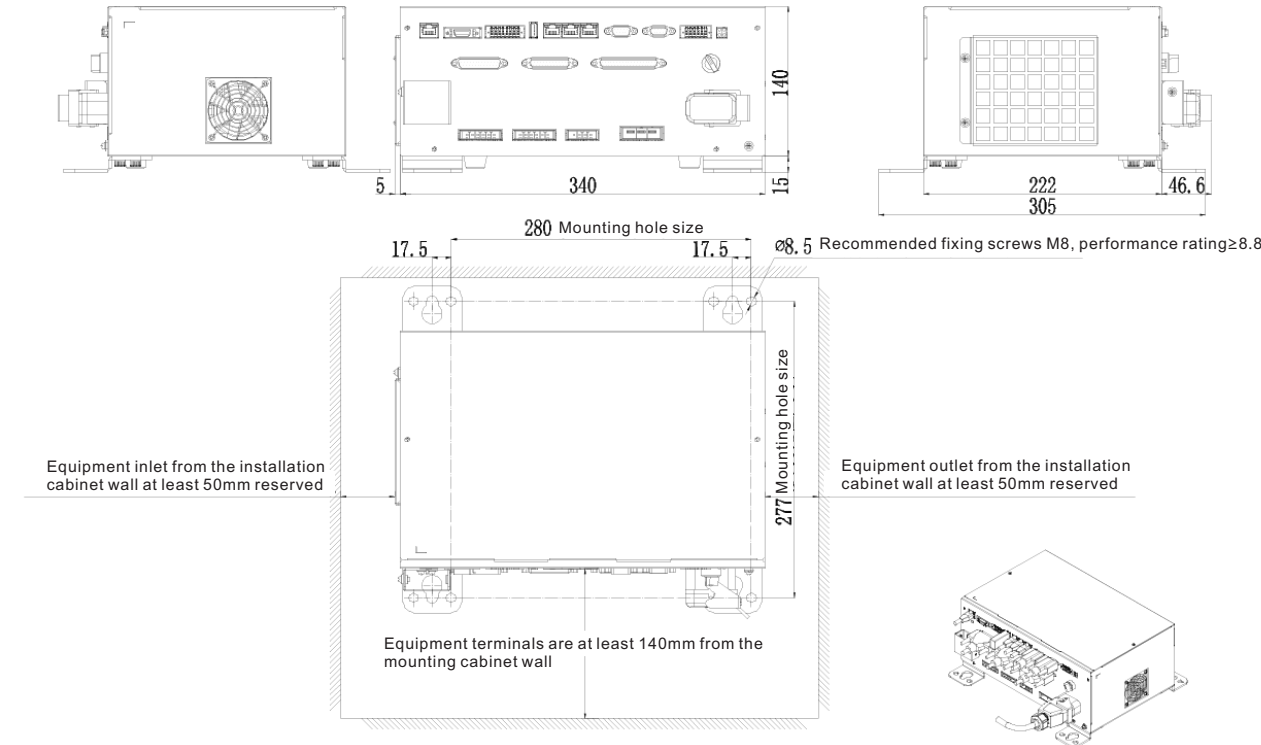
Product configuration

Supported motor types	ADTECH(QXS series)	Motor power: 100W-1000W
	Tamagawa	Motor power: 100W-1000W
	Panasonic	Motor power: 100W-1000W
Supported encoder types		Multiturn absolute, singleturn absolute

QC410B output size dimension figure- with Foot Pad (Unit:mm)



QC410B output size dimension figure- with Mounting plate (Unit:mm)

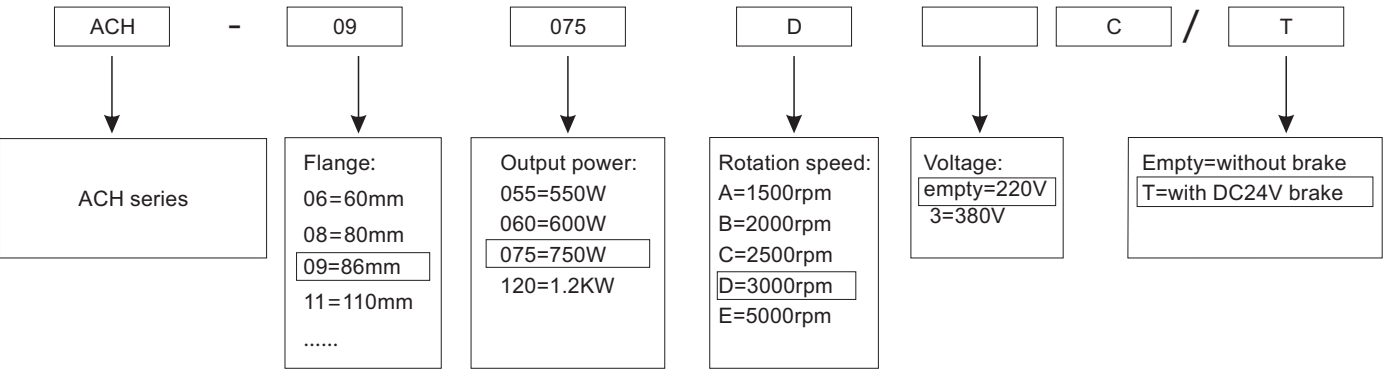


servo motor



naming rule

ACH servo motor series

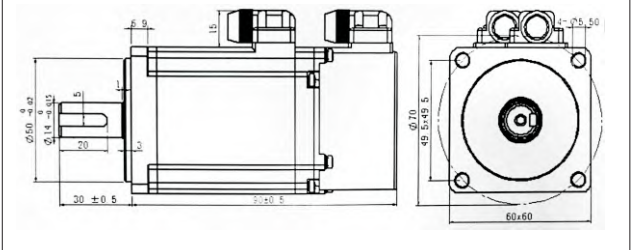


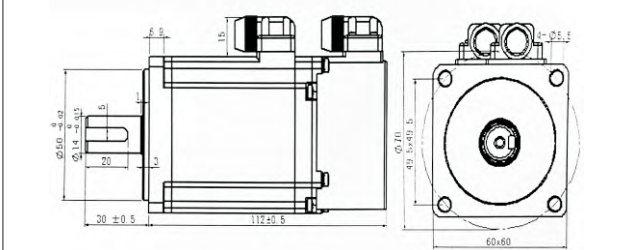
ADTECH ACH Series Servo Motor List

Model	ACH-06020DI-G	ACH-06040DI-G	ACH-06060DI-G	ACH-08075DI-G/ ACH-09075DC	ACH-13100CI-G	ACH-11120DI-G	ACH-11120BI-G	ACH-11150DI-G
Matching driver	QS7AA010M	QS7AA010M	QS7AA020M	QS7AA020M	QS7AA030M	QS7AA030M	QS7AA030M	QS7AA030M/ QS7AA050M2
Flange (mm)	60	60	60	80 / 86	130	110	110	110
Rated power (Kw)	0.2	0.4	0.6	0.75	1.0	1.2	1.2	1.5
Rated torque (Nm)	0.64	1.27	1.91	2.4	4.0	4.0	6.0	5.0
Max torque (Nm)	1.91	3.8	5.73	7.1	12.0	12.0	12.0	15.0
Rated current (A)	1.7	2.5	3.2	3.5	4.0	5.0	4.5	6.0
Rated speed (rpm)	3000	3000	3000	3000	2500	3000	2000	3000
Rated voltage (V)	220	220	220	220	220	220	220	220
Wire q'ty of encoder (ppr)	2500	2500	2500	2500	2500	2500	2500	2500
Dia. Of shaft (mm)	14	14	14	19	22	19	19	19
Motor length (mm)	90	117	134	121	157	182	212	204
Servo cables option	3M,5M and 10M for power cable, encoder cable and control cable							

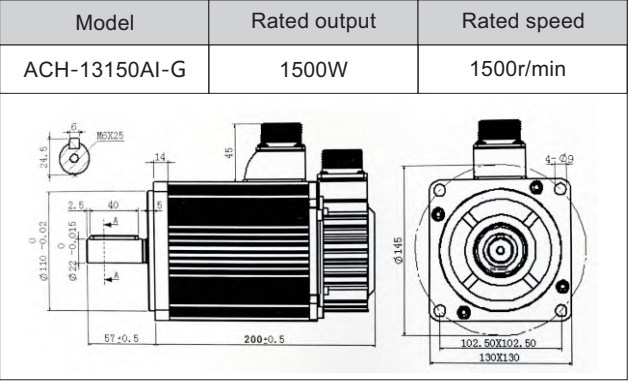
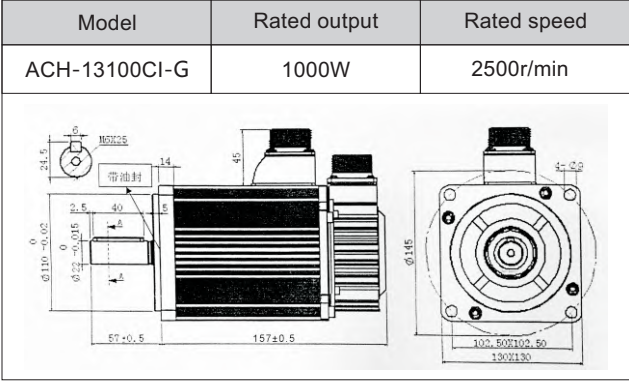
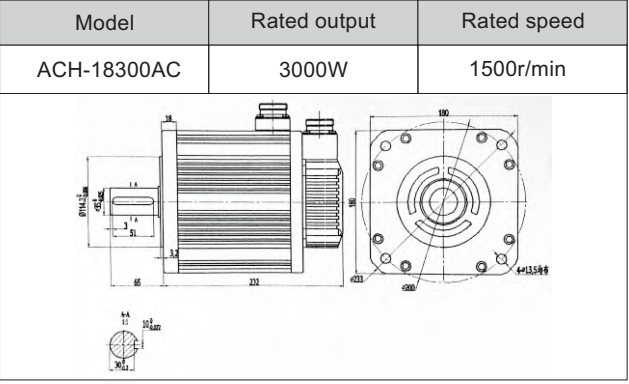
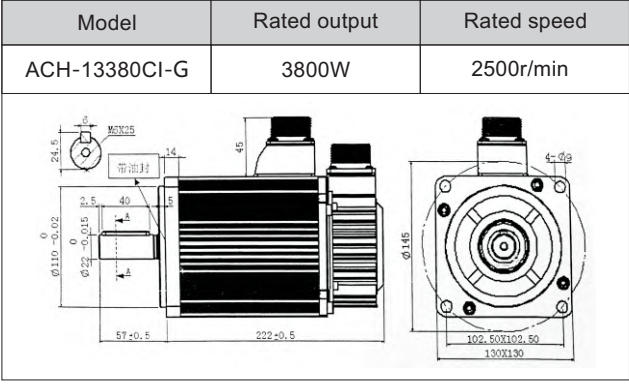
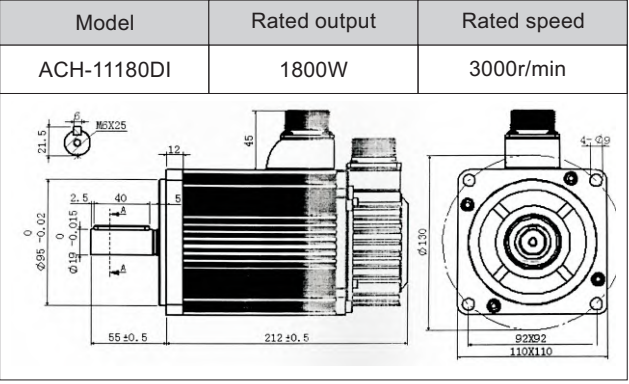
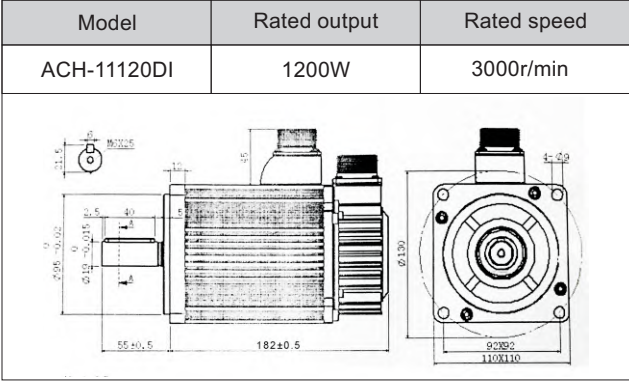
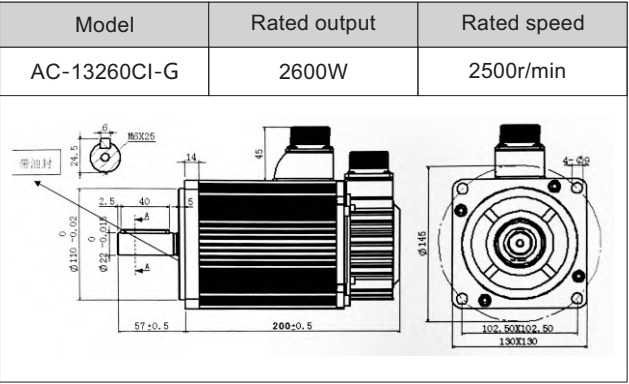
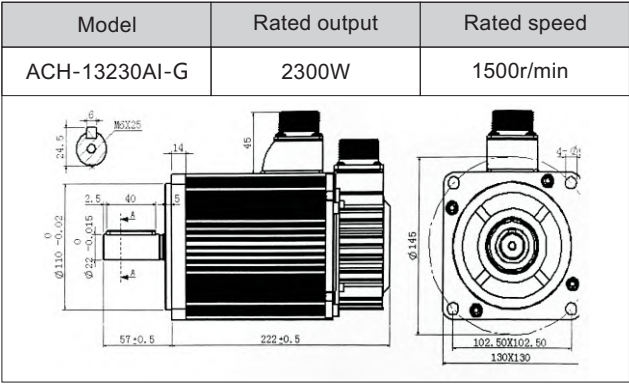
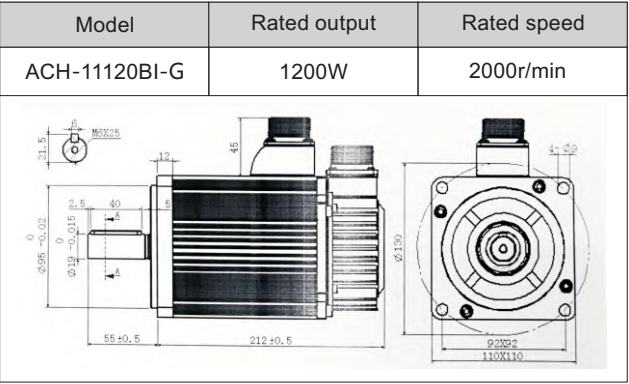
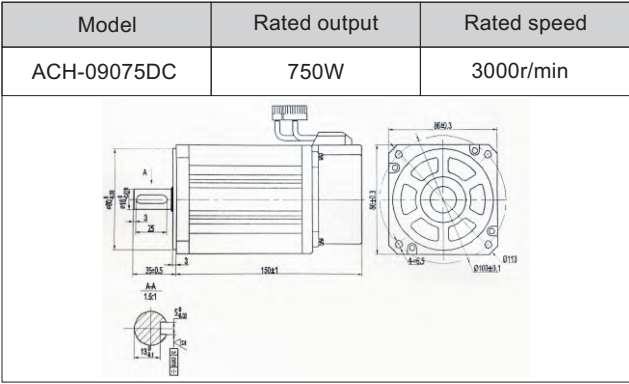
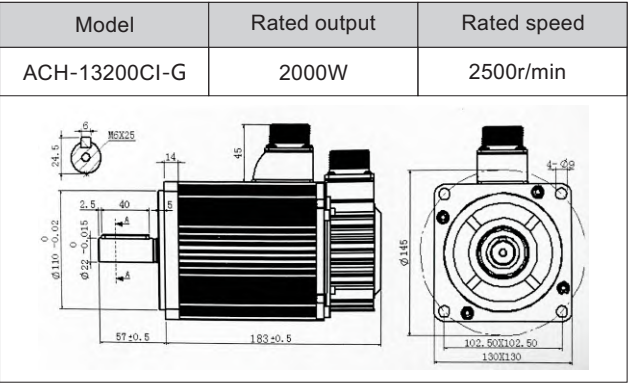
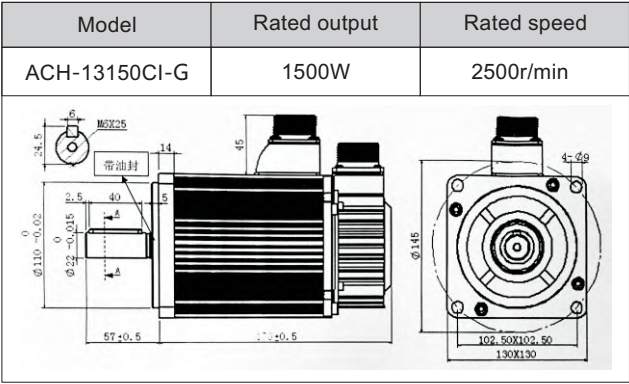
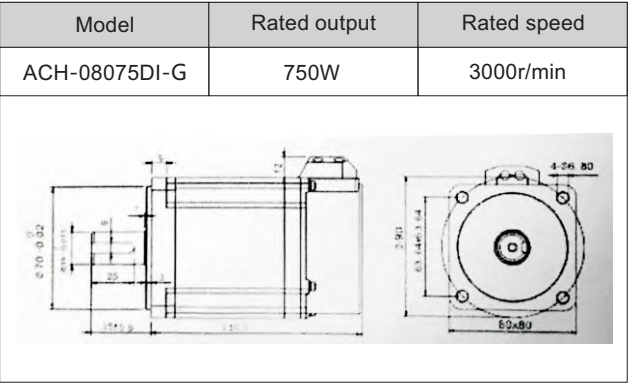
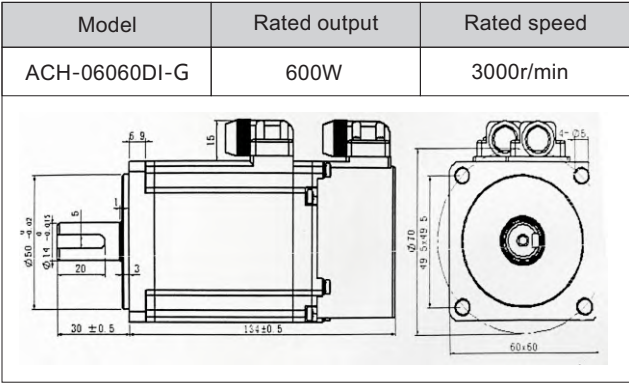
Model	ACH-13150CI-G	ACH-13150AI-G	ACH-11180DI-G	ACH-13200CI-G	ACH-13230AI-G	ACH-13260CI-G	ACH-18300AC	ACH-13380CI-G
Matching driver	QS7AA030M/ QS7AA050M2	QS7AA050M2	QS7AA050M2	QS7AA050M2	QS7AA050M2	QS7AA050M2	QS7AA050M2	QS7AA050M2
Flange (mm)	130	130	110	130	130	130	180	130
Rated power (Kw)	1.5	1.5	1.8	2.0	2.3	2.6	3.0	3.8
Rated torque (Nm)	6.0	10.0	6.0	7.7	15.0	10.0	19.0	15.0
Max torque (Nm)	18.0	25.0	18.0	22.0	30.0	25.0	47.0	45.0
Rated current (A)	6.0	6.0	6.0	7.5	9.5	10.0	12.0	15.0
Rated speed (rpm)	2500	1500	3000	2500	1500	2500	1500	2500
Rated voltage (V)	220	220	220	220	220	220	220	220
Wire q'ty of encoder (ppr)	2500	2500	2500	2500	2500	2500	2500	2500
Dia. Of shaft (mm)	22	22	19	22	22	22	35	22
Motor length (mm)	170	200	212	183	222	200	232	222
Servo cables option	3M,5M and 10M for power cable, encoder cable and control cable							

low inertia series (motor) 3000r/min

Model	Rated output	Rated speed
ACH-06020DI-G	200W	3000r/min
		

Model	Rated output	Rated speed
ACH-06040DI-G	400W	3000r/min
		

low inertia series (motor) 3000r/min



QX series servo driver (selection table)

QX series Linear Motor Driver

		Product picture		Model	Suitable motor	motor capacity	Input voltage	Input power	Input current	Input current Arms	Input peak current Arms	I/O	Supportable encoder	Brake resistor	Function description	Order description
Pulse Linear Motor Driver	QXL		P Universal type	QXLP04NT01-B	Linear Motor	——	200~230Vac 50/60HZ	1/3 phase	3.6A/2.4A	4.2A	12.6A	10 input 8output	Incremental type encoder (AB orthogonal signal 5V) P.s. please buy QX-XEN01 Conversion plug for the function of Analog encoder (sine-cosine)	——	P type function (button adjustment, position control, auto-gain, resonance suppression, protection function)	CAN/CNB: standard accessory; CN1/EN1: important accessory, E63AG502101 CN1 E59A2110001 EN1
				QXLP06NT01-B		——		1/3 phase	8.6A/5.2A	6.2A	18.6A			——		
				QXLP10NT01-B		——		3 phase	11.6A	9.5A	28.5A			Built-in 50Ω60W		
				QXLP15NT01-B		——		3 phase	13A	13.0A	32.5A					
			H senior type	QXLH04NT01-B	Linear Motor	——	200~230Vac 50/60HZ	1/3 phase	3.6A/2.4A	4.2A	12.6A	10 input 8output	Incremental type encoder (AB orthogonal signal 5V) P.s. please buy QX-XEN01 Conversion plug for the function of Analog encoder (sine-cosine)	——	communication, Hall, IDE, positioning compensation, circuit 2 analog input original point reset function of interior multipoint control	CAN/CNB: standard accessory; CN1/EN1: important accessory, E63AG502101 CN1 E59A2110001 EN1 CN2/CN3: optional accessory, 485 function is needed; EN2: optional accessory, Hall function is needed; (E59A2110001)
				QXLH06NT01-B		——		1/3 phase	8.6A/5.2A	6.2A	18.6A			——		
				QXLH10NT01-B		——		3 phase	11.6A	9.5A	28.5A			Built-in 50Ω60W		
				QXLH15NT01-B		——		3 phase	13A	13.0A	32.5A					
EtherCAT Linear Motor Driver	QXEC		P Universal type	QXEC04NE	linear motor DDR	——	200~230Vac 50/60HZ	1/3 phase	3.6A/2.4A	4.2A	12.6A	8 input 4 output	Incremental type encoder (AB orthogonal signal 5V) P.s. please buy QX-XEN01 Conversion plug for the function of Analog encoder (sine-cosine)	——	P type function, resonance suppression, Support for: linear motor&DDR motor, resonance suppression, protection function PP mode, PV mode, PT mode, CSP mode CSV model, CST model, IP model, zero reset.	CAN/CNB: standard accessory; CN1/EN1: important accessory, E63AG26210 CN1 E59A2110001 EN1 CN3/CN4: important accessory, L08011020/1m L08011021/0.3m
				QXEC06NE		——		1/3 phase	8.6A/5.2A	6.2A	18.6A			——		
				QXEC10NE		——		3 phase	11.6A	9.5A	28.5A			Built-in 50Ω60W		
				QXEC15NE		——		3 phase	13A	13.0A	32.5A					
			H senior type	QXEC04NE-H	linear motor DDR	——	200~230Vac 50/60HZ	1/3 phase	3.6A/2.4A	4.2A	12.6A	8 input 4 output	Incremental type encoder (AB orthogonal signal 5V) P.s. please buy QX-XEN01 Conversion plug for the function of Analog encoder (sine-cosine)	——	P type function, Hall phase conversion、	CAN/CNB: standard accessory; CN1/EN1: important accessory, E63AG26210 CN1 E59A2110001 EN1 CN3/CN4: important accessory, L08011020/1M L08011021/0.3M EN2: optional accessory, Hall function is needed (E59A2110001)
				QXEC06NE-H		——		1/3 phase	8.6A/5.2A	6.2A	18.6A			——		
				QXEC10NE-H		——		3 phase	11.6A	9.5A	28.5A			Built-in 50Ω60W		
				QXEC15NE-H		——		3 phase	13A	13.0A	32.5A					

QX series servo motor/driver

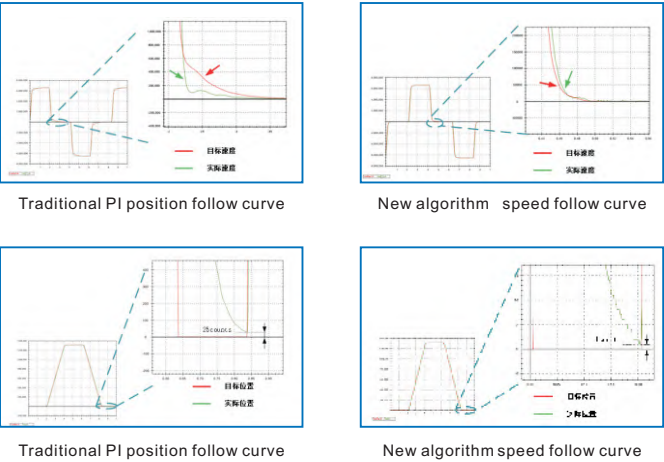
		Product picture		Model	Suitable motor	motor capacity	Input voltage	Input power	Input current	Input current A rms	Input peak current A rms	I/O	Supportable encoder	Brake resistor	Function description	Order description
Pulse type servo motor/driver	QXM		P Universal type	QXMP01NA-B	QXS servo motor	50W、100W	200~230Vac 50/60HZ	1/3 phase	1.1A/0.8A	1.0A	3A	10 input 8 output	17bit single loop	——	P type function Button function Position control resonance suppression protection function	CAN/CNB: standard accessory; CN1/EN1: important accessory, E63AG502101 CN1 E59A2110001 EN1
				QXMP04NA-B		200W/400W		1/3 phase	3.6A/2.4A	4.2A	12.6A			——		
				QXMP06NA-B		750W, 1KW		1/3 phase	8.6A/5.2A	6.2A	18.6A			——		
				QXMP10NA-B		1.5kw, 2KW		3 phase	11.6A	9.5A	28.5A			Built-in 50Ω60W		
				QXMP15NA-B		3KW		3 phase	13A	13A	32.5A					
			H senior type	QXMH01NA-B	QXS servo motor	50W、100W	200~230Vac 50/60HZ	1/3 phase	1.1A/0.8A	1.0A	3A	10 input 8 output	17bit single loop 24bit multi-loop	——	P type function speed/torque mode control mode online change-over interior multipoint control original reset function 485 communication close-loop IDE, screw pitch compensation	CAN/CNB: standard accessory; CN1/EN1: important accessory, E63AG502101 CN1 E59A2110001 EN1 CN2/CN3: optional accessory (485 function is needed) EN2: E59A2110001 optional accessory (close loop function is needed) battery box: optional accessory (24bit multi-loop motor is needed)
				QXMH04NA-B		200W/400W		1/3 phase	3.6A/2.4A	4.2A	12.6A			——		
				QXMH06NA-B		750W, 1KW		1/3 phase	8.6A/5.2A	6.2A	18.6A			——		
				QXMH10NA-B		1.5kw, 2KW		3 phase	11.6A	9.5A	28.5A			Built-in 50Ω60W		
				QXMH15NA-B		3KW		3 phase	13A	13A	32.5A					
EtherCAT servo motor/driver QXE	QXE		P Universal type	QXEP01NE	QXS servo motor	50W、100W	200~230Vac 50/60HZ	1/3 phase	1.1A/0.8A	1.0A	3A	8 input 4 output	17bit single loop 24bit multi-loop	——	P type function PP mode PV mode PT mode CSP mode CSV mode CST mode zero reset resonance suppression protection function	CNA/CNB: standard accessory; CN1/EN1: important accessory, E63AG26210 CN1 E59A2110001 EN1 CN2/CN3: important accessory, L08011020/1m (from driver to control port) L08011021/0.3m (from driver to driver port)
				QXEP04NE		200W/400W		1/3 phase	3.6A/2.4A	4.2A	12.6A			——		
				QXEP06NE		750W, 1KW		1/3 phase	8.6A/5.2A	6.2A	18.6A			——		
				QXEP10NE		1.5kw, 2KW		3 phase	11.6A	9.5A	28.5A			Built-in 50Ω60W		
				QXEP15NE		3KW		3 phase	13A	13A	32.5A					
			H senior type	QXEH01NE	QXS servo motor	50W、100W	200~230Vac 50/60HZ	1/3 phase	1.1A/0.8A	1.0A	3A	8 input 4 output	17bit single loop 24bit multi-loop	——	P type function, close loop,	CNA/CNB: standard accessory; CN1/EN1: important accessory, E63AG26210 CN1 E59A2110001 EN1 CN2/CN3: important accessory, L08011020/1m (from driver to control port) L08011021/0.3m (from driver to driver port) EN2: optional accessory (close loop function is needed) battery box: optional accessory (24bit multi-loop motor is needed)
				QXEH04NE		200W/400W		1/3 phase	3.6A/2.4A	4.2A	12.6A			——		
				QXEH06NE		750W, 1KW		1/3 phase	8.6A/5.2A	6.2A	18.6A			——		
				QXEH10NE		1.5kw, 2KW		3 phase	11.6A	9.5A	28.5A			Built-in 50Ω60W		
				QXEH15NE		3KW		3 phase	13A	13A	32.5A					

QX series servo motor/driver



International servo technology

Adopt new generation control algorithm,faster,more stable and more precise.



5 magnetic pole number



Japan Nikon encoder

High speed,high response,high precise positioning

Response rate: 2.89KHz 24 bit incremental,absolute encoder 0~2ms setting time

24bit

support high precise encoder

2.89KHz

fast response rate

0~2ms

setting time

1024 subdivision

biss protocol encoder

Vibration Suppression

6pcs notch filter、multi-frequency suppression、low frequency suppression

6 pcs

limit filter

multi-frequency vibration suppression

$\geq 0.6\text{Hz}$ 20Hz

high/low frequency resonance suppression

Input Shaping

end-shaking suppression

EtherCAT communication

RS485 Modbus、EtherCAT

built-in PLC function

I/O 10 input 9 output

RS485

Modbus

EtherCAT

built-in PLC function

10/9

I/O

other function

auto-tuning, close-loop, pitch compensation, fault self-diagnosis, capture comparison

automatic parameter setting

close-loop

pitch compensation

origin reversion function

fault intelligent diagnosis

multifunction real-time monitoring

programming operation

internal multipoint control

QXM servo (pulse type) selection table

Item			Specification	P type	H type	C type
Basic specification	control mode		IGBT PWM control sine wave current drive			
	main power (cable voltage)	standard power driver	AC220V (1Φ or 3Φ)	●	●	●
		high power driver	AC380V (3Φ)			
general specification	position control	command control mode	exterior pulse or interior command			
		exterior command pulse mode	PD、CW+CCW、AB	●	●	●
		electronic gear ratio	$\frac{1}{65536} \leq \text{electronic gear ratio} < 256$			
	speed or torque control	command control mode	external simulation voltage command			
		input voltage range	-12~12V	—	●	○
		input impedance	approx 10kΩ			
function list	digit keyboard and operation		6 bit digital display, 4pcs functional operation key	●	●	○
	RS485 communication		Modbus communication protocol	—	●	○
	I/O		input 10, output 8	●	●	●
	RS232 communication		RS232 serial port direct communication	●	●	○
	close loop		receiving feedback signal of loading port to achieve close loop control	—	●	○
	pitch compensation		real time compensation for pitch error of mechanical system	—	●	○
	multistage position		switching the driver and setting interior multistage position by I/O	●	●	○
	vibration suppression		mechanical system resonance suppression	●	●	○
			end-motion vibration suppression	—	●	○
	programmable		compile the appointed command to reach motion control	—	●	○
	gain-switching		5 level gain-switching is available	●	●	○
	origin reversion function		auto-running to equipment origin	—	●	○
	positioning completed judgement		0~5000Pulse	●	●	○
	feedforward gain compensation		speed feedforward、acceleration feedforward	●	●	○
	positive/negative limit		software/hardware are available	●	●	○
	regenerative disposal		external connection of regenerative braking resistance	●	●	○
	protection function		over current,over voltage,regenerative breakdown,encoder abnormal alarming etc.	●	●	○

“●” means the function was chosen “○” means the function is selective “—” means the function is none

QXM servo (pulse type) spare parts list

classification	name	code	specification	corresponding port	picture
plug	encoder plug	E59A2110001	SM-10P, 10 bit, bilayer, split type	EN1、EN2	
	power plug	E5901208102	2EDGKM-5.08-08P, 8 bit, single layer, bending feet, green	CNA	
	control cable pin	E63AG502101	MY11-50T, male pin, 50 feet, semimetal, feet distance: 1.27mm	CN1	
	UVW power cable connector	E5901203103	3 bit, single layer, female pin, feet distance 5.08(female pin of screw thread), straight feet, green	CNB	
QX PC Suite debugging cable	RS232 tap-changer	L1315200002	UT-880, 1M	CN2、CN3	
	Ethernet interface transfer to Serial interface connection cable (RS232)	L011029M8P2	0.5M	CN2、CN3	
RS485 and PC communication cable	tap-changer	L1315200001	UT-890, 1M	CN2、CN3	
	Ethernet interface transfer to Serial interface connection cable (RS485)	L01011019	0.5M	CN2、CN3	
RS485 communication cable	RS485 network communication cable (from control to driver)	L08011011	1.5M	CN2、CN3	
	RS485 network communication cable (from driver to driver)	—	0.2M	CN2、CN3	
others	battery	E31A3V60002	lithium battery, 3.6V, 1200mAh		
	battery box	E31013001	MR-J3BAT	3.6V, 2000MAH non-rechargeable disposable lithium battery	
	renewable brake resistor	selection on demand			

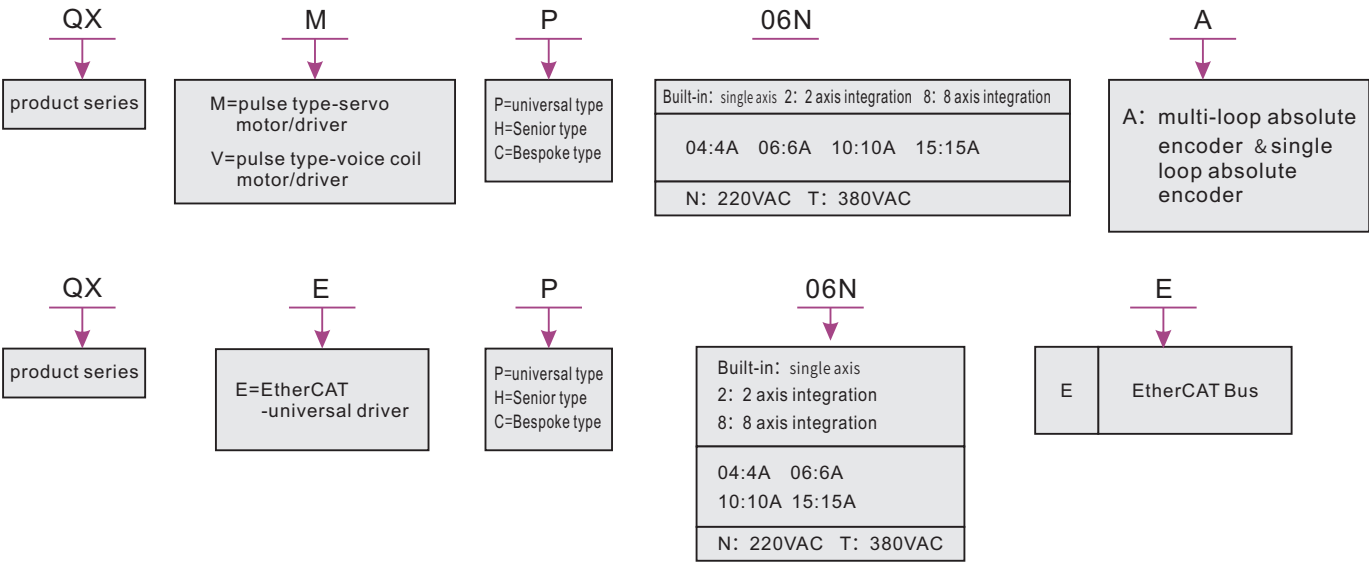
QXM/QXE servo outer regenerative resistor capacity selection table(optional)

Driver model	Driver model	motor instantaneous speed deceleration time	≤3000 r/min	>3000 r/min	≤3000 r/min	>3000 r/min	≤3000 r/min	>3000 r/min
			100ms	100ms	100ms-200ms	100ms-200ms	>200ms	>200ms
QXE#04NE	QXM#04N#-#	outer regenerative resistor capacity	none	50Ω 120W	none	50Ω 120W	none	50Ω 120W
QXE#06NE	QXM#06N#-#		50Ω 60W	50Ω 120W	50Ω 60W	50Ω 120W	none	50Ω 120W
QXE#10NE	QXM#10N#-#		built-in	30Ω 750W	none	30Ω 470W	built-in	30Ω 470W
QXE#15NE	QXM#15N#-#		built-in	20Ω 1KW	none	20Ω 1KW	built-in	20Ω 1KW

Attention:

- 1、 Please configure the outer regenerative resistor according to the char,power is greater than the figure in chart,can't smaller than the figure in chart.
- 2、 All the data in chart calculated according to the servo driver's normal voltage(AC220V),Please increase resistor's power if it's over 220V or consult our engineer.

QX series named rules



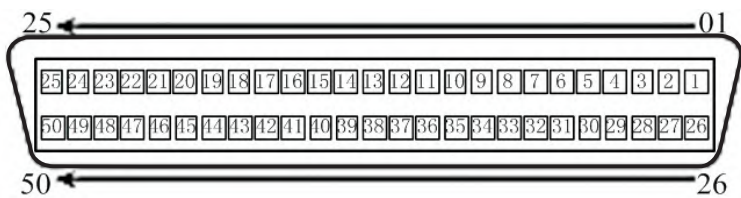
QXM series servo driver/motor (selection table)

suitable driver	motor model	encoder	rated power (W)	rated torque (N.m)	max. Torque (N.m)	rated current (A)	max. current (A)	Rated speed (r/min)	highest speed (r/min)	rotary inertia (10 ⁻⁴ *kg.m ²)
QXMP01NA-B QXMH01NA-B	QXSS-04010EA011	A:24bit	100	0.32	0.95	1.2	3.6	3000	6000	0.045
	QXSS-04010EA011	multi-loop								
	QXSS-04010EB011	B:17bit								
	QXSS-04010EB011	single loop								
QXMP04NA-B QXMH04NA-B	QXSS-06020EA011	A:24bit	200	0.64	1.92	2.1	6.3	3000	6000	011:0.15 111:0.17
	QXSS-06020EA111	multi-loop								
	QXSS-06020EB011	B:17bit								
	QXSS-06020EB111	single loop								
	QXSH2-06020EA011	A:24bit	200	0.64	1.92	1.7	5.6	3000	6000	011:0.26 111:0.3
	QXSH2-06020EA111	multi-loop								
	QXSH2-06020EB011	B:17bit								
	QXSH2-06020EB111	single loop								
	QXSS-06040EA111	A:24bit	400	1.27	3.82	3.2	9.6	3000	6000	011:0.27 111:0.29
	QXSS-06040EA011	multi-loop								
	QXSS-06040EB011	B:17bit								
	QXSS-06040EB111	single loop								
	QXSH2-06040EA011	A:24bit	400	1.27	3.82	2.5	8.4	3000	6000	011:0.52 111:0.62
	QXSH2-06040EA111	multi-loop								
	QXSH2-06040EB011	B:17bit								
	QXSH2-06040EB111	single loop								
QXMP06NA-B QXMH06NA-B	QXSS-08075EA011	A:24bit	750	2.39	7.2	4.8	13.4	3000	6000	011:0.9 111:1.0
	QXSS-08075EA111	multi-loop								
	QXSS-08075EB011	B:17bit								
	QXSS-08075EB111	single loop								

QXM series servo driver/motor (selection table)

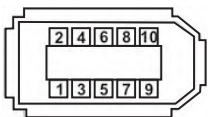
suitable driver	motor model	encoder	rated power (W)	rated torque (N.m)	max. Torque (N.m)	rated current (A)	max. current (A)	Rated speed (r/min)	highest speed (r/min)	rotary inertia (10 ⁻⁴ *kg.m ²)
QXMP06NA-B QXMH06NA-B	QXSS-08075CA011	A:24bit	750	3.5	9.5	5	13.5	2000	3500	1.2
	QXSS-08075CA111	multi-loop								
	QXSS-08075CB011	B:17bit								
	QXSS-08075CB111	single loop								
	QXSH2-08075EA011	A:24bit	750	2.39	7.17	4.5	14.9	3000	6000	011:1.67 111:1.97
	QXSH2-08075EA111	multi-loop								
	QXSH2-08075EB011	B:17bit								
	QXSH2-08075EB111	single loop								
	QXSS-08100EA011	A:24bit	1000	3.18	9.54	4.9	14.7	3000	4500	011:1.2 111:1.3
	QXSS-08100EA111	multi-loop								
	QXSS-08100EB011	B:17bit								
	QXSS-08100EB111	single loop								
	QXSH-08100EA011	A:24bit								011:2.38 111:2.48
	QXSH-08100EA111	multi-loop								
	QXSH-08100EB011	B:17bit								
	QXSH-08100EB111	single loop								
	QXSH-13085BA011	A:24bit	850	5.39	14.3	7	19	1500	3000	011:13.9 111:15.9
	QXSH-13085BA111	multi-loop								
	QXSH-13085BB011	B:17bit								
	QXSH-13085BB111	single loop								
	QXSM-13100CA011	A:24bit	1000	4.77	14.3	6	18	2000	3000	011:4.6 111:6.6
	QXSM-13100CA111	multi-loop								
	QXSM-13100CB011	B:17bit								
	QXSM-13100CB111	single loop								
	QXSH-13100CA011	A:24bit		4.77	14.3	6	18	2000	3000	011:13.9 111:15.9
	QXSH-13100CA111	multi-loop								
	QXSH-13100CB011	B:17bit								
	QXSH-13100CB111	single loop								
QXMP10NA-B QXMH10NA-B	QXSM-13150CA011	A:24bit	1500	7.16	21.5	8.2	24.6	2000	3000	011:20 111:22
	QXSM-13150CA111	multi-loop								
	QXSM-13150CB011	B:17bit								
	QXSM-13150CB111	single loop								
	QXSH-13150CA011	A:24bit		7.16	21.5	8.4	25.2	2000	3000	011:6.7 111:8.7
	QXSH-13150CA111	multi-loop								
	QXSH-13150CB011	B:17bit								
	QXSH-13150CB111	single loop								
QXMP15NA-B QXMH15NA-B	QXSM-13200CA011	A:24bit	2000	9.55	28.6	10.5	31.5	2000	3000	011:8.7 111:10.7
	QXSM-13200CA111	multi-loop								
	QXSM-13200CB011	B:17bit								
	QXSM-13200CB111	single loop								
	MRMK-18300BB011	B:17bit	3000	19.1	38	11	36.5	1500	2000	011:49.8 111:61.8
	MRMK-18300BB111	single loop								

QXM servo (pulse type) CN1 connection cable



Pin No	code	signal name
1	BR+	motor braking lead wire (positive/negative pole are available)
2	BR-	
3	AO+	encoder's A phase pulse difference output, AO+ signal output
4	AO-	encoder's A phase pulse difference output, AO- signal output
5	BO+	encoder's A phase pulse difference output, BO+ signal output
6	BO-	encoder's A phase pulse difference output, BO- signal output
7	ZO+	encoder's Z phase pulse difference output, ZO+ signal output
8	ZO-	encoder's Z phase pulse difference output, ZO- signal output
9	PS+	reservation
10	PS-	reservation
12	SG	3~10 pin shared signal grounding
20	SG	21 pin corresponding signal grounding
21	V-REF/ T-REF	V-REF: outer speed reference voltage input; T-REF: outer torque reference voltage input
22	T-COMP	outer torque compensation voltage input
23	SG	22 pin corresponding signal grounding
26	DR+/CCW+	outer torque compensation voltage input; 22 pin corresponding signal grounding; only for 5V collector open circuit input; high speed pulse input: over than 5Mpps; orthogonal pulse mode, A pulse input; PD mode, direction command input; CW/CCW mode, CCW pulse input;
27	DR-/CCW-	
47	SG	26.27 pin shared signal grounding
28	PU+/CW+	differential pulse command input; CW/CCW mode, CW pulse input; orthogonal pulse mode, B pulse input;
29	PU-/CW-	
48	SG	28.29 pin shared signal grounding
13	PULS-	optocoupler pulse input, 5v differential pulse, 12-24V collector open circuit pulse; PD mode, PULS is pulse signal;
14	PULS+	
15	SIGN-	CW/CCW mode, PULS is CW pulse; orthogonal pulse mode, PULS is A pulse;
16	SIGN+	
38	SG	13~16 pin shared signal grounding
17	SG	18.19 pin shared signal grounding
31	SG	30 pin corresponding signal grounding
11	CONT10	universal input (collector open circuit)
18	CONT9	universal input (collector open circuit)
19	CONT8	universal input (collector open circuit)
30	CONT7	universal input (collector open circuit)
32	CONT6	universal input (collector open circuit)
33	CONT5	universal input (collector open circuit)
34	CONT4	universal input (collector open circuit)
35	CONT3	universal input (collector open circuit)
36	CONT2	universal input (collector open circuit)
37	CONT1	universal input (collector open circuit)
50	CONT-COM	universal input for external power supply input
39	OUT1	universal output (NPN)
40	OUT2	universal output (NPN)
41	OUT3	universal output (NPN)
42	OUT4	universal output (NPN)
43	OUT5	universal output (NPN)
44	OUT6	universal output (NPN)
45	OUT7	universal output (NPN)
46	OUT8	universal output (NPN)
24	OUT-COM	universal output shared return port (NPN output connection)
25	OUT-COM	universal output shared return port (NPN output connection)
49	NC	none connection

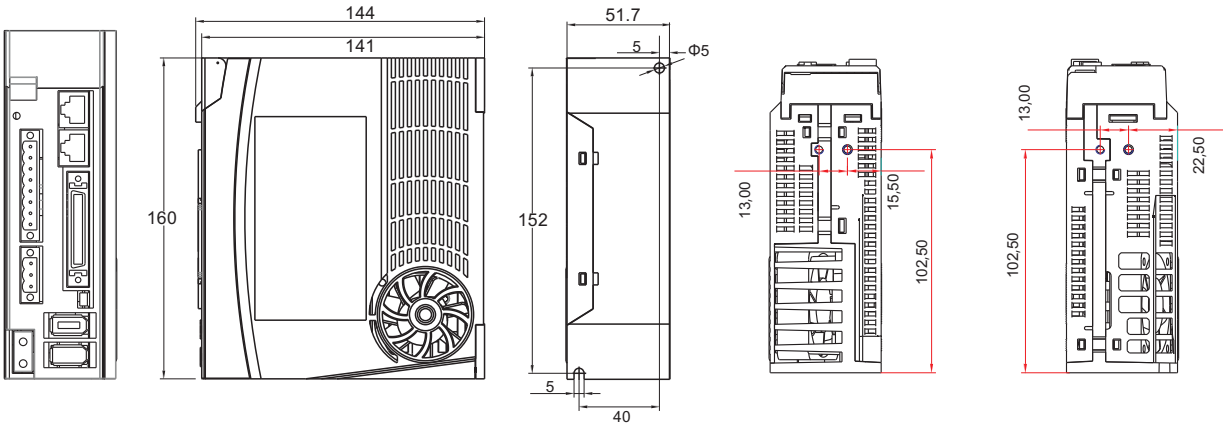
QXM/QXE servo EN1/EN2 pin connection cable



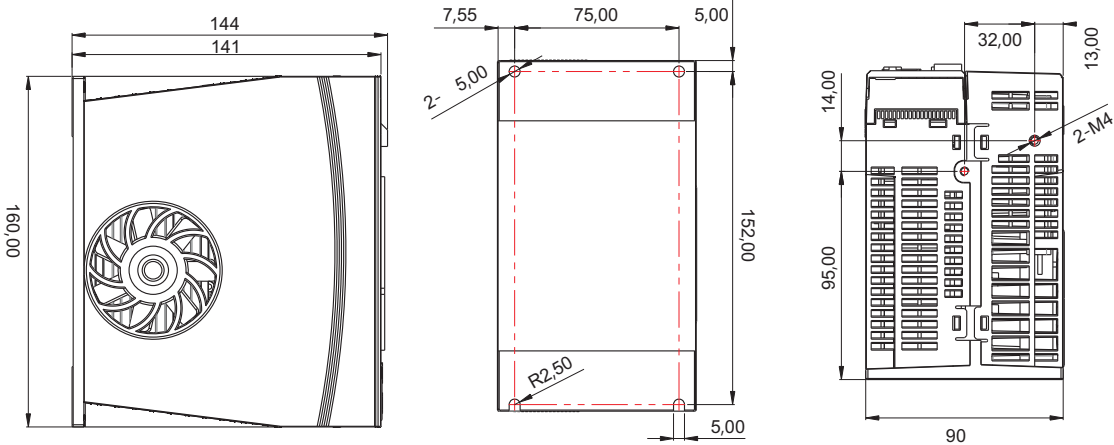
encoder type	communication encoder		pulse encoder	
EN pin code	signal name	description	signal name	description
1	5V	power	5V	power
2	SG	power grounding	SG	power grounding
3	NC	free	NC	free
4	NC	free	NC	free
5	NC	free	B+	B phase pulse input
6	NC	free	B-	
7	ES+	serial data port	A+	A phase pulse input
8	ES-		A-	
9	NC	free	Z+	Z phase pulse input
10	NC		Z-	
Connecting EN connector of metal shell with motor encoder's grounding wire by shielded wire				

QXM/QXE Servo dimension drawing (unit: mm)

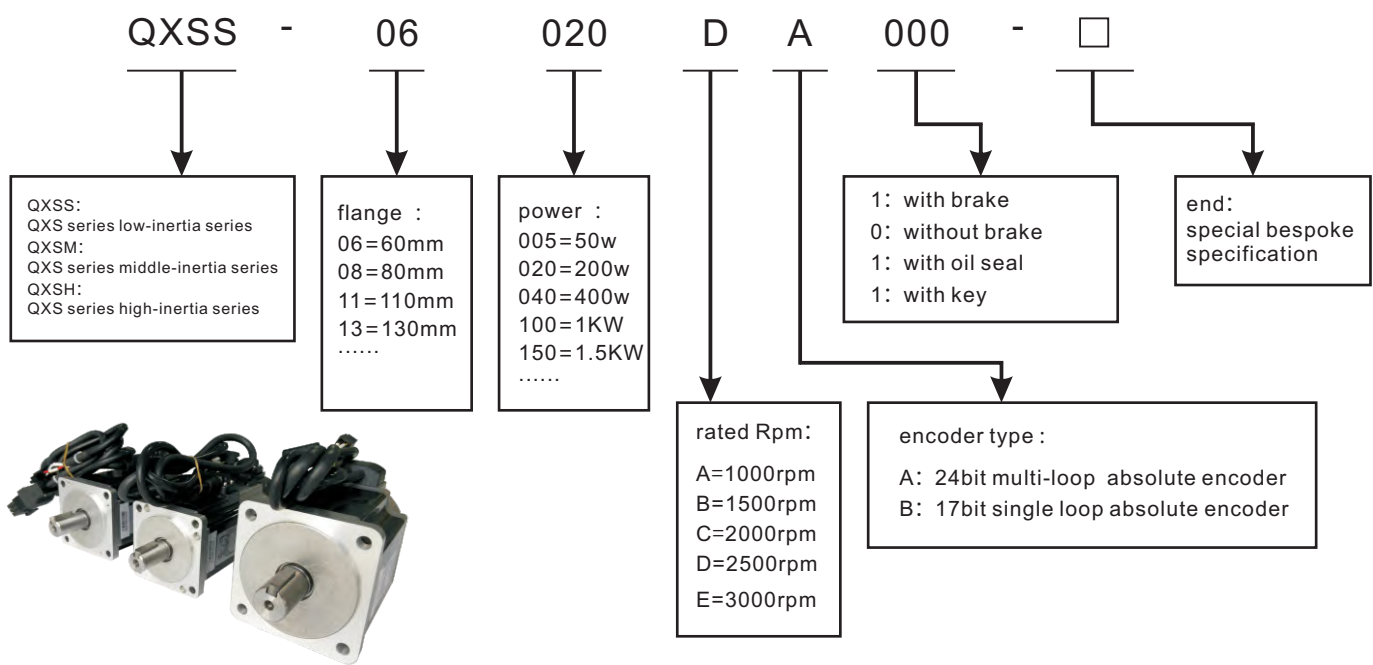
1KW below



1.5KW and 3KW



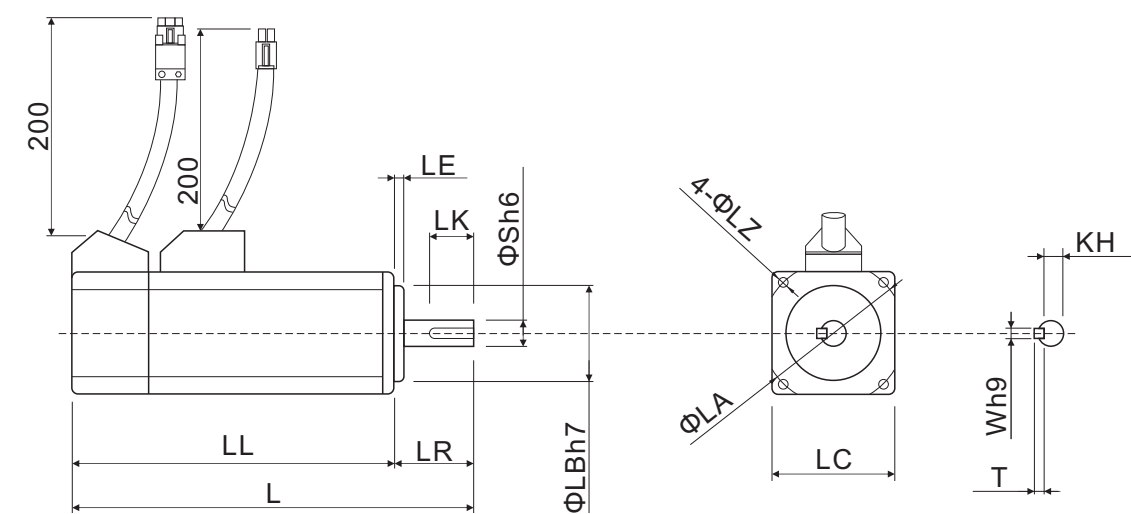
QXS series servo motor-naming rule list



QXSS series motor dimension list (unit: mm)

model	LC flange	LL (without brake)	LL (with brake)	L (without brake)	L (with brake)	LE	LK motor key length	S shaft diameter	LR shaft length	LB	LA	LZ	T	KH	W
QXSS-04010E	40	80	110	105	135	3	19.5	8	25	30	46	3.5	3	6	3
QXSS-06020E	60	78.5	116.5	108.5	146.5	3	25	14	30	50	70	5	5	11	5
QXSS-06040E	60	98.5	136.5	128.5	166.5	3	25	14	30	50	70	5	5	11	5
QXSS-08075E	80	106	147	141	182	3	25	19	35	70	90	6	6	15.5	6
QXSS-08075C	80	131	172	166	2207	3	25	19	35	70	90	6	6	15.5	6
QXSS-08100E	80	131	172	166	207	3	25	19	35	70	90	6	6	15.5	6

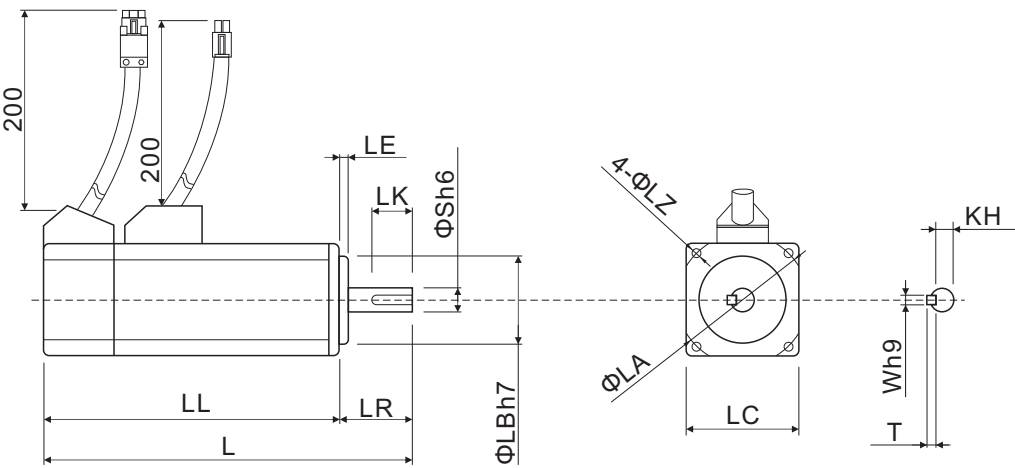
QXSS motor series overall dimension drawing [130-180 flange] (unit: mm)



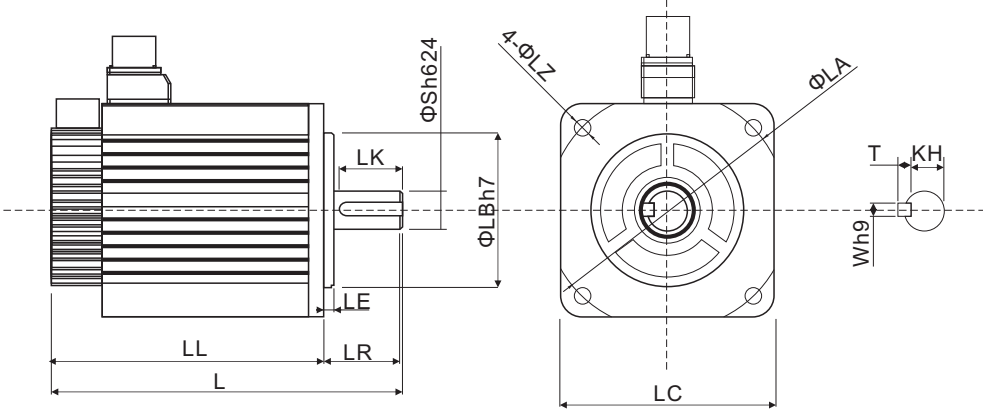
QXSH series motor dimension list (unit : mm)

model	LC flange	LL (without brake)	LL (with brake)	L (without brake)	L (with brake)	LE	LK motor key length	S shaft diameter	LR shaft length	LB	LA	LZ	T	KH	W
QXSH2-06020E	60	78	103.5	108	133.5	3	20	14	30	50	70	5.5	5	11	5
QXSH2-06040E	60	95.5	128	125.5	158	3	20	14	30	50	70	5.5	5	11	5
QXSH2-08075E	80	106.5	133.5	141.5	168.5	3	25	19	35	70	90	6.8	6	15.5	6
QXSH-08100E	80	131	172	166	211	3	25	19	35	70	90	6	6	15.5	6
QXSH-13085B	130	215	181	270	236	6	25	19	55	110	145	9	5	16	5
QXSH-13100C	130	171	205	226	260	6	41	22	55	110	145	9	7	18	8
QXSH-13150C	130	188.5	222.5	243.5	277.5	6	45	22	55	110	145	9	7	18	8
MRMK-18300B	180	169	212	248	291	18	50	35	79	114	200	14	12	29	12

QXSH series motor overall dimension drawing [40-80 flange] (unit: mm)



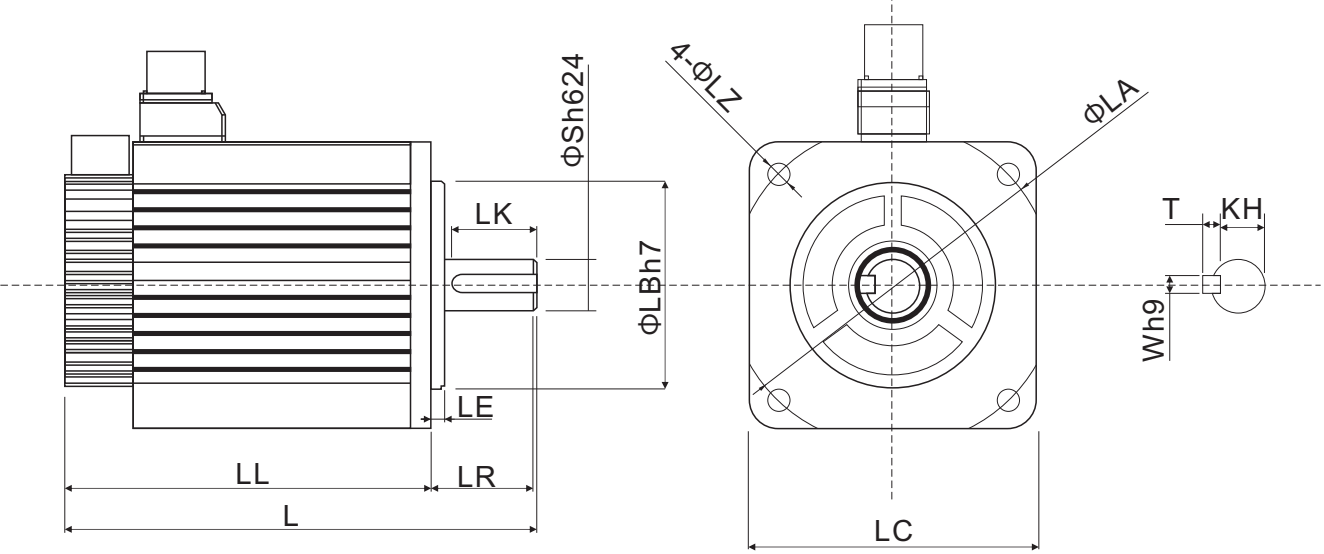
QXSH series motor overall dimension drawing [130-180 flange] (unit: mm)



QXSM series motor size table (unit: mm)

model	LC flange	LL without brake	LL with brake	L without brake	L with brake	LE	LK key length	S shaft diameter	LR shaft length	LB	LA	LZ	T	KH	W
QXSM-13100C	130	153.5	205	208.5	260	6	41	22	55	110	145	9	7	18	8
QXSM-13150C	130	171	205	226	260	6	45	22	55	110	145	9	7	18	8
QXSM-13200C	130	188.5	222.5	243.5	277.5	6	45	22	55	110	145	9	7	18	8

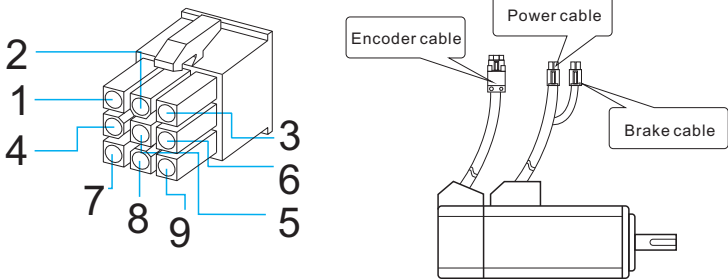
QXSM series motor dimensions (unit: mm)



Motor wiring definition

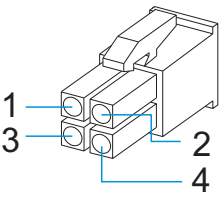
Definition of encoder signal wiring when using QXS (40-80mm flange) motor

Terminal symbol	signal	colour
1	SD+	blue
2	SD-	purple
3	BAT+	Orange
6	EX5V	White
7	EX0V	black
8	BAT-	Brown
9	Shielded wire	Shielded wire



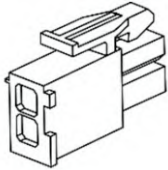
Definition of power cable wiring when using QXS (40-80mm flange) motor

Terminal symbol	Signal	Color
1	U	Red
2	V	White
3	W	Black
4	PE	Green/Yellow



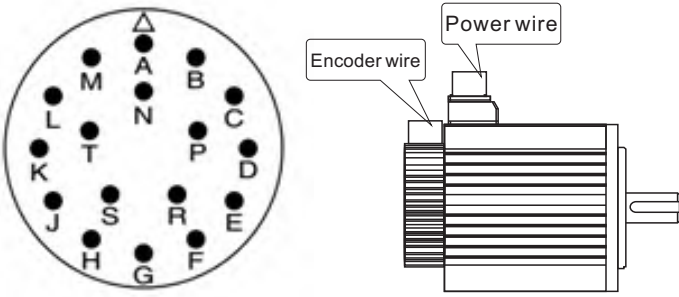
Definition of brake wiring when using QXS (40-80mm flange) motor

Terminal symbol	Signal	Color
1	24+	Yellow
2	24-	Yellow



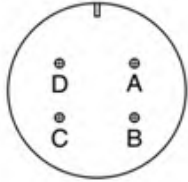
Definition of encoder signal wiring when using QXS (130-180mm flange) motor

Terminal symbol	Signal	Color
K	SD+	blue
L	SD-	Purple
T	BAT+	Orange
H	EX5V	White
G	EX0V	Black
S	BAT-	Brown
J	Shielding Cables	Shielding Cables



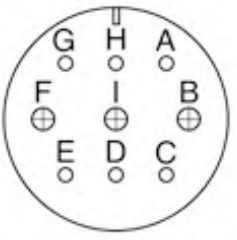
Definition of power cable wiring when using QXS (130-180mm flange) motor

Terminal symbol	Signal	Color
A	U	Red
B	V	White
C	W	Black
D	PE	Green/Yellow



Definition of power cable wiring (with brake) when using QXS (130-180mm flange) motor

Terminal symbol	Signal	Color
F	U	Red
I	V	White
B	W	Black
E-D	PE	Green/Yellow
G	Brake	±24V No polarity
H		



Industry Application Controller CNC Spring Controller

As a built multi subdivision standard industrial for CNC application control system, ADTECH launching advanced solutions for specified industrial. On a mature of leading motion control platform, ADTECH provide the solution of industry application controller for clients! In especially, Motion control system for spring making machine, brush making machine, dispensing machine, CNC cutting machine, welding machine, spraying machine, laser making machine and so on, which are reach to the leading level in domestic, and it wins a widely reputation of customers.

Features

- ◆ Adopt form programming , easy to operation
- ◆ Support on-line programming easy to debugging
- ◆ Probe with fast response to ensure high-precision
- ◆ Complete information system
- ◆ Can be extended to external MPG and easy to debug for large machine
- ◆ Support USB transfer, U disk copy and easy to upgrade and copy program
- ◆ Support Chinese-English shift, with high-adaptability
- ◆ Cam, sending lines turn-core work simultaneously with sending wire precision $\pm 0.01\text{mm}$ & accuracy ± 0.1 degrees of camshaft & the spindle of turn-core. Each rotating shaft has no zeroing function alone.

Related Product Introduction

ADT-TH08HA-D01 2-3 Axis Controller for Compression Spring Machine



5.7 Inch industrial LED display;
English/Chinese interface, applicable to different countries;
Support 2-3 axis servo control;
Support 4-8 groups of probe cylinders;
Specifically to 8 type compression spring machinery;
MPG debugs processing function;

ADT-TH08R-A02 2~4 Axis Controller for Compression Spring Machine



10.4 inch Industrial color LCD display;
English/Chinese interface, applicable to different countries;
Support 2-4 axis servo control;
Support 4-8 groups of probe cylinders with quick response;
MPG debugs processing & test processing function;

ADT-CNC820B-A02 4 Axis ADT-CNC820B-B02 6 Axis Controller for Spring Machine



15 inch color LCD display;
Command form programming, display in English /Chinese with simple & intuitive programming;
Support directly editing to input data for programming after move each axis to target location
By MPG or panel ;

ADT-TH1204-b00 12 Axis Controller for Spring Machine



Brush Making Controller

Features

- ◆ Support english operation system;
- ◆ Tufting speed can reach 700 hole / min;
- ◆ Support self-colored and bicolor hair planting ;
- ◆ Maximum storage of 2000 processing files with each up to 100,000 holes;
- ◆ Flash function enables fast and convenient copy of processing files among different machinery;
- ◆ Support hand-held box operation;
- ◆ Short circuit protection for output, with long product life;
- ◆ Be able to adjust the main shaft processing speed by controller;
- ◆ Be able to control the height of hair-planting, suitable for various different workpiece;
- ◆ Signals of each control shafts are lead out independently, it is convenient to connect the wire;
- ◆ With various of processing type, and applied to different situation, Automatic, semi-automatic test-work processing mode are optional;
- ◆ Various of editing function, user input data in simple and fast;
- ◆ Support user data,automatic generation, simple and easy to use.

Related Product Introduction

ADT-ZM210 2 Axis Brush Making Controller



Self-colored display screen,240*128 resolution;
Support self-colored and bicolor hair planting;
Tufting speed can reach 500 holes/ min;
Maximum storage of 2000 processing files with each up to 700 holes.

ADT-ZM300B 3 Axis Brush Making Controller



5.7 inch LCD self-colored display screen;
3 axis step and servo motor control;
Tufting speed can reach 700 holes/ min;
Maximum storage of 2000 processing files with each up to 100,000 holes.

ADT-ZM400B 4 Axis Brush Making Controller



5.7 inch LCD self-colored display screen;
Support self-colored and bicolor hair planting;
Tufting speed can reach 700 holes/ min;
Maximum storage of 2000 processing files with each up to 100,000 holes.

ADT-ZM310 3 Axis Brush Making Controller



Self-colored display screen,240*128 resolution;
3 axis step and servo motor control Maximum storage of 2000 processing files with each up to 100,000 holes;
Support Z axis 360 degree unlimited rotation.

ADT-ZM410 4 Axis Brush Making Controller



5.7 inch LCD self-colored display screen;
4 axis step and servo motor control;
Tufting speed can reach 700 holes/ min;
Maximum storage of 2000, processing files with each up to 100,000 holes.

ADT-ZM410Y 4 Axis High-speed Toothbrush Making Controller



5.7 inch LCD self-colored display screen;
2+2 axis step and servo motor control ;
Tufting speed can reach 700 holes/ min;
Maximum storage of 2000 processing files with each up to 100,000 holes.

ADT-ZM500B 5 Axis Brush Making Controller



5.7 inch LCD self-colored display screen;
5 axis step and servo motor control;
Tufting speed can reach 700 holes/min;
Maximum storage of 2000 processing files with each up to 100,000 holes.

Color Touch Screen Series

ADT-ZM620 4-6 Axis Brush Making Controller



10.4 inch color LCD display screen;
4-6 axis step and servo motor control;
Support mutil-head for tufting and drilling;
Through the pedal switch for unloading workpieces , safe and convenient operation;
Main shaft processing speed can be adjust by programming, work table speed can also be adjusted with it synchroly.

ZM320- Brush Making Controller



5.6inch true-color display, touch screen, friendly interface;
Slim volume, simple structure , easy to wire;
3 axis step and servo motor control;
Support U disk read and write, program updates;
Easy and convenient to teach, support CSV directly importing processing data and MPG teach;
Support interpolation processing and index acceleration/deceleration movement;
Support software/hardware limit with more safe & reliable system;
Graphic pattern teach with intuition & convenience;
Support processing path display track;

ADT-ZM510 5 Axis Brush Making Controller



5.7 inch LCD self-colored display screen;
5 axis step and servo motor control;
Tufting speed can reach 700 holes/min;
Maximum storage of 2000 processing files with each up to 100,000 holes;
Be able to control the height of hair-planting ,suitalbe for various shape of workpiece.

ZM220—Brush Making Controller



5.6inch true-color display, touch screen, friendly interface;
Slim volume, simple structure , easy to wire;
2 axis step and servo motor control;
Support U disk read and write, program updates;
Easy and convenient to teach, support CSV directly importing processing data and MPG teach;
Support interpolation processing and index acceleration/deceleration movement;
Support software/hardware limit with more safe & reliable system;
Graphic pattern teach with intuition & convenience;
Support processing path display track;

ZM420– Brush Making Controller



5.6inch true-color display, touch screen, friendly interface;
Slim volume, simple structure , easy to wire;
4 axis step and servo motor control;
Support U disk read and write, program updates;
Easy and convenient to teach, support CSV directly importing processing data and MPG teach;
Support interpolation processing and index acceleration/deceleration movement;
Support software/hardware limit with more safe & reliable system;
Graphic pattern teach with intuition & convenience;
Support processing path display track;

Dispensing Controller

Features

- ◆ Support three axis space straight line interpolation , two axis arc and ellipse interpolation etc;
- ◆ Real time multi-task control technology and hardware interpolation technology ensure high reliability;
- ◆ 3340: 32 lines input, 16 lines output; 8848: 34 lines input, 18 lines output; 8860: 86 lines input, 40 lines output; 3540: 32 lines input, 16 lines output; 8540: 25 lines input, 8 lines output, fully optical coupling control, excellent anti-interference performance
- ◆ Support control of 4-8 adhesive injecting terminals;
- ◆ Use speed perspective arithmetic, automatic smooth corner speed, ensuring smooth process;
- ◆ Have abundant instruction sets: motion instructions such straight line, arc, single point and ellipse, and instructions such as port output, waiting input, delay pause, selecting glue gun, resetting motor, etc;
- ◆ Advanced editing functions such as batch modification, array copy, graph shift, graph zooming, automatic rounding and common graph library ect.
- ◆ Importing computer graphs: convert the graphs in the computer to PLT files or TCF files or G code files, and then convert to process files of adhesive injecting machine through the controller; each process file can save 100,000 process points
- ◆ Graph display function: display the graphs in the process files intuitively and display the process track dynamically in real time;
- ◆ Track lag adhesive open and advance adhesive close function, eliminating the adhesive stacking problem at the start point and end point;
- ◆Wire drawing function: eliminating glue adhesive problem
- ◆Support cycle processing, single processing, automatic processing and step processing ect
- ◆ File instruction and edit function, provide advanced edit functions such as batch modification, array copy, graph shift, graph zooming and automatic rounding; common graph library is also available;
- ◆ Flash memory reading-writing function: read and write process files in flash memory disk;
- ◆ Convenient help system, calling out help document by pressing shift+F1 in any interface.

Related Product Introduction

ADT-TV5500DJ 2-4 Axis Dispensing Controller (Split Type)



3D processing graphic , support PLT,TCF file;
Support instruction edit function and match with common graphic library;
Smooth track motion,speed perspective arithmetic;
Have abundant instruction sets, be able to satisfy all kinds of complex dispensing processing;
Hight performance-price.

ADT-TP3340DJ 2-4 Axis Dispensing Controller



5.7 inch touch display screen, interface intuitionistic and clear;
Data input by instructed type, operation simple and easy to study;
Support PLT format graphic leading-in function, simplified complex track motion;
Support double-head dispensing, more efficient;
With processing graph display function, file storage room reach 256M.

ADT-TP3540DJ 2-4 Axis Dispensing Controller



5.6 inch color display, touch type, friendly interface;
Thinnest volume, convenient connection;
Support single-double head dispensing;
Data input by instructed type, operation simple and easy to study;
Support PLT,TCF file,function, simplified complex track motion;
With processing graph display function.

Full-automatic visual dispensing coating controller



Adopt visual positioning, graph zooming, ensuring the accuracy of dispensing;
Adopt ADT-8860+PC(or notebook) +CCD program
Support motion graph editing and instruction and imposition positioning

Punching CNC Controller

Features

- ◆ Support multi-language option, cost effective;
- ◆ With CAM template guide edit function, easy to use;
- ◆ Support CAM file resolving process;
- ◆ Macro-variable,programming of macro definition,enable to many kinds of logical relation.Support macro programming with parameter being used,more covenient for user to program;
- ◆ With complete self-diagnostic function, internal and external real-time display, it will show alarm if any exception.

Related Product Introduction

NCT-02 2 Axis Punching CNC Controller



Support X Y 2 axis motion;
Easy to learn, friendly interface, convenient operation;
Can preview process track and real-time following;
Support twice relocation and clamp avoid function, realize palte no dead zone process;
With single punch, continuous punch, step punch etc. different kinds of punching mode, increase the process efficiency;
Can recognize CAD convert code, compatible with usual punching machine software code, support CAM template programming;
With complete self-diagnostic function, internal and external real-time display, it will show alarm if any exception.

NCT-04 4 Axis Punching CNC Controller



Add T axis die change control and C axis die rotary control;
Max support 36 working position, can customize mould library;
Easy to learn, friendly interface, convenient operation;
Can preview process track and real-time following;
Support twice relocation and clamp avoid function, realize palte no dead zone process;
With single punch, continuous punch, step punch etc. different kinds of punching mode, increase the process efficiency;
Can recognize CAD convert code, compatible with usual punching machine software code, support CAM template programming;
With complete self-diagnostic function, internal and external real-time display, it will show alarm if any exception.

CNC Engraving Control System

Features of System

- ◆ Support Multi-language ,More economic
- ◆ CAM mode guiding editing function, easy to use
- ◆ Support CAD file explanation processing
- ◆ Macro-Variable、 Macro definition Programming, realize kinds of logical relationship. Support to evoke the Macro-program with parameter, make more convenient to program.
- ◆ Complete Self-diagnose function, Real –time display the Status of Internal/External. Once abnormal, alarms.

Product's Introduction

CNC9640 3-4 Axis CNC Engraving System



Control Axis, control X, Y, Z, axis, μm interpolation accuracy
Support several kinds of communications (USB,U disk, RS232COM),easy for user to realize different data transmitting and software upgrade.
With network port, support remote control and DNC file transmitting processing
Open platform, customize the system according to customer's demand
Complete Self-diagnose function, Real display the Status of Internal/External. Once abnormal, alarms
Support to use Additional Panel and Handheld Box, convenient for Tool Setting
Macro-Variable、 Macro definition Programming, realize kinds of logical relationship. Support to evoke the Macro-program with parameter, make more convenient to program.
DXF+G code mode function, change the DXF to G code processing automatic
Support the generated working file by MasterCAM, Type 3, ArtCam, UG, PROE software;
Pre-treat motion processing with rapid and intelligent speed, processing stable;
Teaching Function: Teaching+Command Program , apply the form teaching means, simple and direct
Graphic Simulation Function: Show the graphic of processing program and tool's moving track when in actual running; without control machine's running but do the processing of simulation tool path;
check editing processing program true or false.
Multi-Interface Options
Supports multilingual interface display, automatic fault alarm. Rich processing information display, processing time, number of pieces
Parameter Tabular: Randomly sets the Input/output Address, only need to write the corresponding value in the Address Bar of the configuration table.

Color screen series key machine system

Color screen series key machine system

With 7 inch color LCD display screen, humanized operation interface, beautiful, information and clear, easy to operate; Supports 2-4 axis stepper & servo motor control. Support U disk read and write, to support hard and soft limit , support handwheel function ; functional diversification , can process a variety of mainstream keys, easy customization ; Key parameters inputing use CAM way to simplify the programming step, the program inside needn't enter the key process parameters; Tips can be refered while operating system, use easily; increasing 26 letters of the alphabet code , can handle both coded numbers and letters .

KY260A CNC key machine system



Using ARM + FPGA high-end hardware platform to improve stability and efficiency of the system itself; Supports two-axis milling and general milling teeth function, can process simple accessories of lockmaking industry; With the functions of key -coded jump-select processing, custom processing, screening generated, conditional judgment, special processing, automatic grouping, automatic generation, etc; The specific products which is based on milling system development, with the characteristics of low cost, functional, versatile, high efficiency, small size, easy to operate, easy to use, etc; Can be processed with lines according to the special requirements of customers;

KY360A CNC key machine system



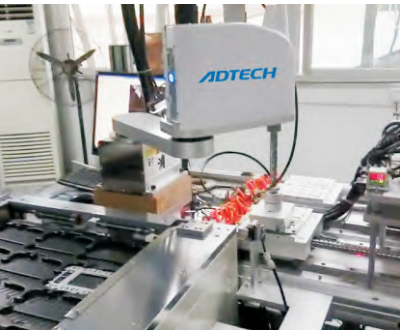
Using ARM + FPGA high-end hardware platform to improve stability and efficiency of the system itself; Most of common key can be processed in key processing industry, as keys with within bilateral, external bilateral, snake, double-deck, etc; Can process common accessories of lockmaking industry;. With the functions of key -coded jump-select processing, custom processing, screening generated, conditional judgment, special processing, automatic grouping, automatic generation, etc; The specific products which is based on milling system development, with the characteristics of low cost, functional, versatile, high efficiency, small size, easy to operate, easy to use, etc; Can be processed with lines according to the special requirements of customers;

KY460A CNC key machine system



Using ARM + FPGA high-end hardware platform to improve stability and efficiency of the system itself; Most of common key can be processed in key processing industry with double power head, as keys with within bilateral, external bilateral, snake, double-deck, etc; Can process common accessories of lockmaking industry; With the functions of key -coded jump-select processing, custom processing, screening generated, conditional judgment, special processing, automatic grouping, automatic generation, etc; The specific products which is based on milling system development, with the characteristics of low cost , functional, versatile, high efficiency , small size, easy to operate, easy to use, etc; Can be processed with lines and the new special key customization according to the special requirements of customers;

Scara Robot Applications



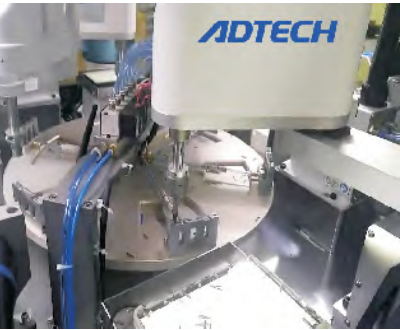
Assemble a computer



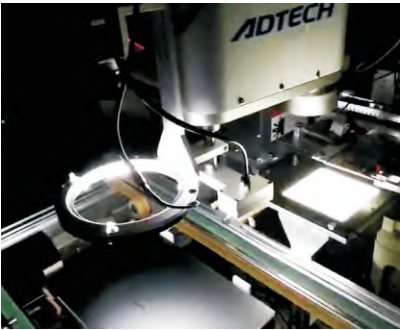
Automobile spare parts and parts



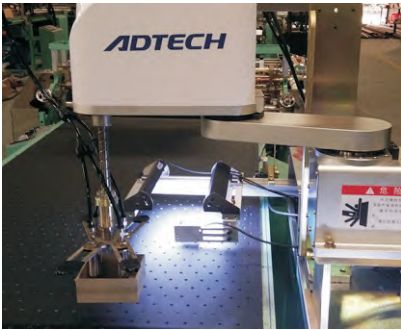
Medical handling



Up and down material for mobile phone parts



Punch up and down material



Grab a box to track a piece of paper



Injection molding machine



Visual sorting



Chip handling



PCB board detection



Circuit board handling



Screwdriver

AR Series 4 axis scara robot

Model			AR3215	AR4215	AR5215	AR6215/6220	AR7225	AR9225	AR6520	AR7520	AR8520	AR61030	AR81030	AR101030
Photo														
Species			SCARA	SCARA	SCARA	SCARA	SCARA	SCARA	SCARA	SCARA	SCARA	SCARA	SCARA	SCARA
Axis			4	4	4	4	4	4	4	4	4	4	4	4
Arm length			300mm	400mm	500mm	600mm	700mm	900mm	600mm	700mm	800mm	600mm	800mm	1000mm
Standard cycle time*1			0.35s	0.35s	0.36s	0.37s	0.37s	0.38s	0.39s	0.38s	0.38s	0.4s	0.38s	0.38s
Rated/Max payload			2kg/5kg	2kg/5kg	2kg/5kg	2kg/5kg	2kg/5kg	2kg/5kg	5kg/10kg	5kg/10kg	5kg/10kg	10kg/20kg	10kg/20kg	10kg/20kg
Axis specification*2	J1 Axis	Arm length	100mm	200mm	300mm	300mm	400mm	600mm	300mm	400mm	500mm	200mm	400mm	600mm
		Rotation range	±132°	±132°	±132°	±131°	±131°	±131°	±131°	±131°	±131°	±148°	±148°	±148°
	J2 Axis	Arm length	200mm	200mm	200mm	300mm	300mm	300mm	300mm	300mm	300mm	400mm	400mm	400mm
		Rotation range	±148°	±148°	±148°	±141°	±141°	±141°	±141°	±141°	±141°	±150°	±150°	±150°
	J3 Axis	Route	150mm	150mm	150mm	150mm/200mm	250mm	250mm	200mm	200mm	200mm	300mm	300mm	300mm
	J4 Axis	Rotation range	±360°	±360°	±360°	±360°	±360°	±360°	±360°	±360°	±360°	±360°	±360°	±360°
Motor power		J1 Axis	400W	400W	400W	750W	750W	750W	750W	750W	750W	1000W	1000W	1000W
		J2 Axis	200W	200W	200W	200W	200W	200W	400W	400W	400W	400W	400W	400W
		J3 Axis	100W	100W	100W	100W	100W	100W	200W	200W	200W	400W	400W	400W
		J4 Axis	100W	100W	100W	100W	100W	100W	200W	200W	200W	400W	400W	400W
Max running speed		J1、J2 Axis synthesis	5236.0mm/s	6283.2mm/s	7330.4mm/s	7068.6mm/s	7723.1mm/s	7068.6mm/s	7068.6mm/s	6806.8mm/s	6632.3mm/s	6545.0mm/s	6806.8mm/s	6981.3mm/s
		J3 Axis	1333.3mm/s	1333.3mm/s	1333.3mm/s	1212.1mm/s	1212.1mm/s	1212.1mm/s	1111.1mm/s	1111.1mm/s	1111.1mm/s	1388.9mm/s	1388.9mm/s	1388.9mm/s
		J4 Axis	1666.7°/s	1666.7°/s	1666.7°/s	1666.7°/s	1666.7°/s	1666.7°/s	1500.0°/s	1500.0°/s	1500.0°/s	1000.0°/s	1000.0°/s	1000.0°/s
Repeat positioning accuracy*3		J1、J2 Axis synthesis	±0.01mm	±0.01mm	±0.01mm	±0.015mm	±0.015mm	±0.015mm	±0.015mm	±0.015mm	±0.015mm	±0.03mm	±0.03mm	±0.03mm
		J3 Axis	±0.01mm	±0.01mm	±0.01mm	±0.015mm	±0.015mm	±0.015mm	±0.01mm	±0.01mm	±0.01mm	±0.02mm	±0.02mm	±0.02mm
		J4 Axis	±0.005°	±0.005°	±0.005°	±0.005°	±0.005°	±0.005°	±0.005°	±0.005°	±0.005°	±0.01°	±0.01°	±0.01°
J3 Axis max down force			100N	100N	100N	110N	110N	110N	240N	240N	240N	380N	380N	380N
J4 Axis allows loading moment of inertia		Rated	0.005 kg·m ²	0.005 kg·m ²	0.005 kg·m ²	0.005 kg·m ²	0.005 kg·m ²	0.005 kg·m ²	0.05 kg·m ²	0.05 kg·m ²	0.05 kg·m ²	0.1kg·m ²	0.1kg·m ²	0.1kg·m ²
		Maximum	0.035kg·m ²	0.035 kg·m ²	0.035 kg·m ²	0.035 kg·m ²	0.035 kg·m ²	0.035 kg·m ²	0.2 kg·m ²	0.2 kg·m ²	0.2 kg·m ²	0.9kg·m ²	0.9kg·m ²	0.9kg·m ²
User IO			26PIN DB connector 7 Output, 6 Input	26PIN DB connector 7 Output, 6 Input	26PIN DB connector 7 Output, 6 Input	26PIN DB connector 7 Output, 6 Input	26PIN DB connector 7 Output, 6 Input	26PIN DB connector 7 Output, 6 Input	26PIN DB connector 7 Output, 6 Input	26PIN DB connector 7 Output, 6 Input	26PIN DB connector 7 Output, 6 Input	26PIN DB connector 6 Output, 6 Input	26PIN DB connector 6 Output, 6 Input	26PIN DB connector 6 Output, 6 Input
User Pipe			Φ6×2 Root	Φ6×2 Root	Φ6×2 Root	Φ6×2 Root	Φ6×2 Root	Φ6×2 Root	Φ6×2 Root	Φ6×2 Root	Φ6×2 Root	Φ6×2 Root	Φ6×2 Root	Φ6×2 Root
Installation			Table mounts	Table mounts	Table mounts	Table mounts	Table mounts	Table mounts	Table mounts	Table mounts	Table mounts	Table mounts	Table mounts	Table mounts
Body weight			13.1kg	13.3kg	13.6kg	20kg	20.7kg	22.3kg	24.3kg	25kg	26.5kg	43.5kg	44.8kg	46.3kg

FR series 4 axis hanging scara robot

GR series 4 axis scara robot

Model			FR5215	FR6115	FR8320	Model			GR4215	GR6520
Photo						Photo				
Species			SCARA	SCARA	SCARA	Species			SCARA	SCARA
Axis			4	4	4	Axis			4	4
Arm length			550mm	600mm	850mm	Arm length			400mm	600mm
Standard cycle time* ¹			0.42s (2kg)	0.38s (1kg)	0.45s (3kg)	Standard cycle time* ¹			0.35s (2kg)	0.39s (5kg)
Rated/Max payload			2kg/5kg	1kg/3kg	3kg/5kg	Rated/Max payload			2kg/5kg	5kg/10kg
Axis specification* ²	J1 Axis	Arm length	250mm	300mm	425mm	Axis specification* ²	J1 Axis	Arm length	200mm	300mm
		Rotation range	±360°	±360°	±360°			Rotation range	±134°	±140°
	J2 Axis	Arm length	300mm	300mm	425mm		J2 Axis	Arm length	200mm	300mm
		Rotation range	±360°	±360°	±360°			Rotation range	±145°	±152°
	J3 Axis	Route	150mm	150mm	200mm		J3 Axis	Route	150mm	200mm
	J4 Axis	Rotation range	±360°	±360°	±360°		J4 Axis	Rotation range	±360°	±360°
Motor power		J1 Axis	750W	750W	750W	Motor power		J1 Axis	400W	750W
		J2 Axis	200W	200W	400W			J2 Axis	200W	400W
		J3 Axis	100W	100W	200W			J3 Axis	100W	200W
		J4 Axis	100W	100W	200W			J4 Axis	100W	200W
Max running speed		J1、J2 Axis synthesis	6942.4mm/s	7395.3mm/s	6606.2mm/s	Max running speed		J1、J2 Axis synthesis	6283.2 mm/s	7068.6 mm/s
		J3 Axis	1333.3mm/s	1333.3mm/s	1388.9mm/s			J3 Axis	1246.1 mm/s	1200.0mm/s
		J4 Axis	1666.7°/s	1666.7°/s	1500.0°/s			J4 Axis	1468.2 °/s	1822.8 °/s
Repeat positioning accuracy* ³		J1、J2 Axis synthesis	±0.02mm	±0.02mm	±0.035mm	Repeat positioning accuracy* ³		J1、J2 Axis synthesis	±0.01mm	±0.015mm
		J3 Axis	±0.01mm	±0.01mm	±0.01mm			J3 Axis	±0.01mm	±0.01mm
		J4 Axis	±0.005°	±0.005°	±0.01°			J4 Axis	±0.005°	±0.005°
J3 Axis max down force			100N	100N	190N	J3 Axis max down force			105N	220N
J4 Axis allows loading moment of inertia	Rated	0.005 kg·m ²	0.005 kg·m ²	0.05 kg·m ²	J4 Axis allows loading moment of inertia	Rated	0.006 kg·m ²	0.035 kg·m ²		
	Maximum	0.035 kg·m ²	0.035 kg·m ²	0.2 kg·m ²		Maximum	0.045 kg·m ²	0.138 kg·m ²		
User IO			26PIN DB connector 7 Output 6 Input	26PIN DB connector 7 Output 6 Input	26PIN DB connector 7 Output 6 Input User defined 11 channels	User IO			26PIN DB connector 7 Output 6 Input User defined 11 channels	26PIN DB connector 7 Output 6 Input User defined 11 channels
User Pipe			Φ4×2 Root	Φ4×2 Root	Φ6×3 Root	User Pipe			Φ6×2Root Φ4×1Root	Φ6×2Root Φ4×1Root
Installation			Ceiling installation	Ceiling installation	Ceiling installation	Installation			Table mounts	Table mounts
Body weight			21kg	21.5kg	41kg	Body weight			13.35kg	22.75kg

PTR series 3 axis screwing robot

PR series 4 axis screwing robot

Model			PTR5512	PR5216
Photo				
Species			SCARA	SCARA
Axis			3	4
Arm length			550mm	500mm
Standard cycle time*1			0.39s (5kg)	0.39s (2kg)
Rated/Max payload			5kg/10kg	2kg/5kg
Screw range			—	M3~M5
Axis specification*2	J1 Axis	Arm length	300mm	200mm
		Rotation range	±130°	±133°
	J2 Axis	Arm length	250mm	300mm
		Rotation range	±140°	±140°
	J3 Axis	Route	120mm	160mm
	J4 Axis	Rotation range	—	±360°
Motor power		J1 Axis	750W	750W
		J2 Axis	400W	400W
		J3 Axis	200W	100W
		J4 Axis	—	400W
Max running speed		J1、J2 Axis synthesis	6217.7mm/s	6414.1 mm/s
		J3 Axis	1333.3 mm/s	952.38 mm/s
		J4 Axis	—	20000 °/s
Repeat positioning accuracy*3		J1、J2 Axis synthesis	±0.015mm	±0.02mm
		J3 Axis	±0.025mm	±0.02mm
		J4 Axis	—	—
J3 Axis max down force			250N	140N
User IO			26PIN DB connector 7 Output 6 Input	26PIN DB connector 7 Output 6 Input
User Pipe			Φ6×4Root	Φ6×2Root
Installation			Table mounts	Table mounts
Body weight			20kg	24kg

SD series - six - axis robot

Model		SD500	SD700
Diagram			
Species		Vertical multi-joint	Vertical multi-joint
Number of axes		6	6
Arm length		500mm	700mm
Range of motion	J1	±170°	±170°
	J2	±115°	±115°
	J3	+40°~- 220°	+40°~- 220°
	J4	±185°	±185°
	J5	±125°	±125°
	J6	±360°	±360°
Maximum speed	J1	375°/s	250°/s
	J2	375°/s	185°/s
	J3	430°/s	290°/s
	J4	460°/s	460°/s
	J5	460°/s	460°/s
	J6	600°/s	600°/s
Repeat positioning accuracy		±0.02mm	±0.03mm
Wrist load	Rated	3kg	3kg
	Maximum	5kg	5kg
Maximum allowable instantaneous torque	J5	35Nm	35Nm
	J6	24Nm	24Nm
User signal line		0.14 sq * 16 lines	0.14 sq * 16 lines
Users pipe		Φ4*4roots	Φ4*4roots
Installation		Suits, flip, side-mounted	Suits, flip, side-mounted
Limit protection		Software limit Mechanical limit	Software limit Mechanical limit
Weight		26Kg	28Kg

SD500E

● 产品简介 Product Info.

The SD series of robots are small, small in size and light in weight, making them the most suitable for small work units. Ability to high-speed, high- accuracy completion of loading, sorting, assembly and other work. At the same time, the SD series of robots all cables built-in, can be flexible in a small space for work, installation can be selected for ground installation, hanging, backmount. SD500E features: Wrist rated load 3KG with maximum operating radius of 500mm

● 产品特点 Features

- ▶ Light weight
- ▶ Fast running speed
- ▶ High repeat positioning accuracy
- ▶ Built-in cables

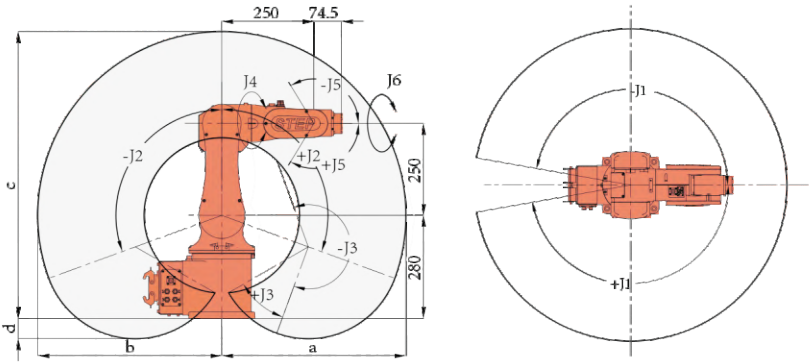
● 产品应用 Application

- ▶ Material handling
 1. greater flexibility, more stable performance, lower energy consumption
 2. with high-speed performance to maximize throughput
 3. long working time
 4. save ground space
- ▶ Assembly
 1. high speed, repeated positioning accuracy
 2. save ground space
 3. long running time



● 工作空间 Working Space

a	b	c	d
500	500	780	55



● 技术指标 Principal Data

型号 Model		SD500E
手腕额定负载 Wrist Rated Payload		3kg
最大工作半径 Max Working Radius		500 mm
自由度 DOF		6
关节速度 Max Speed	J1	370° /s
	J2	370° /s
	J3	430° /s
	J4	300° /s
	J5	460° /s
	J6	600° /s
关节范围 Max Operation Area	J1	± 170°
	J2	± 110°
	J3	+40° ~ -220°
	J4	± 185°
	J5	± 125°
	J6	± 360°
关节允许负载力矩 Wrist Allowable Torque	J4	4.41 Nm
	J5	4.41 Nm
	J6	2.94 Nm
关节允许负载惯量 Wrist Allowable Torque	J4	0.15 kgm ²
	J5	0.15 kgm ²
	J6	0.1 kgm ²
重量 Weight		28 kg
重复定位精度 Position Repeat Accuracy		± 0.02mm
环境温度 Ambient Temperature		0 ~ 40℃

SD700E

●产品简介 Product Info.

The SD series of robots are small, small in size and light in weight, making them the most suitable for small work units. Ability to high-speed, high-accuracy completion of loading, sorting, assembly and other work. At the same time, the SD series of robots all cables built-in, can be flexible in a small space for work, installation can be selected for ground installation, hanging, backmount. SD700E features: Wrist rated load 3KG with maximum operating radius of 700mm

●产品特点 Features

- ▶ Light weight
- ▶ Fast running speed
- ▶ High repeat positioning accuracy
- ▶ Built-in cables

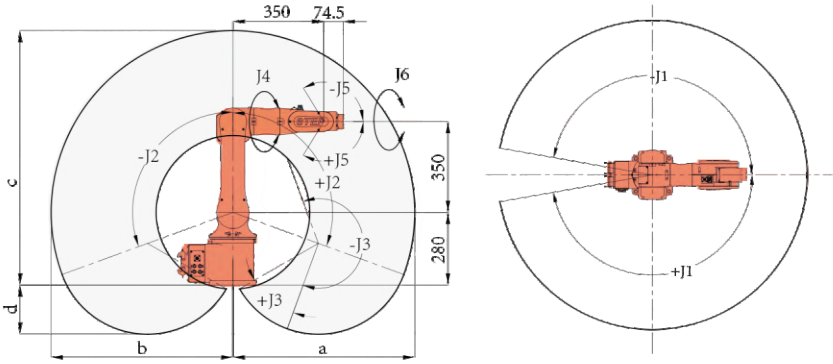
●产品应用 Application

- ▶ Material handling
 1. greater flexibility, more stable performance, lower energy consumption
 2. with high-speed performance to maximize throughput
 3. long working time
 4. save ground space
 5. larger work area
- ▶ Assembly
 1. high speed, repeated positioning accuracy
 2. save ground space
 3. long running time
 4. larger work area



●工作空间 Working Space

a	b	c	d
700	700	980	190



●技术指标 Principal Data

型号 Model		SD700E
手腕额定负载 Wrist Rated Payload		3kg
最大工作半径 Max Working Radius		700 mm
自由度 DOF		6
关节速度 Max Speed	J1	245° /s
	J2	185° /s
	J3	290° /s
	J4	300° /s
	J5	460° /s
	J6	600° /s
关节范围 Max Operation Area	J1	±170°
	J2	±110°
	J3	+40° ~ -220°
	J4	±185°
	J5	±125°
	J6	±360°
关节允许负载力矩 Wrist Allowable Torque	J4	4.41 Nm
	J5	4.41 Nm
	J6	2.94 Nm
关节允许负载惯量 Wrist Allowable Torque	J4	0.15 kgm ²
	J5	0.15 kgm ²
	J6	0.1 kgm ²
重量 Weight		30 kg
重复定位精度 Position Repeat Accuracy		±0.03mm
环境温度 Ambient Temperature		0~40℃

SD900

●产品简介 Product Info.

The SD series of robots is small in size and small. Suitable for component modular small workstations, high-speed, high- accuracy completion of loading, sorting, grinding, coating, assembly and other operations. At the same time, all the cables in the SD series robots are built-in, allowing them to operate flexibly in tight spaces and in a flexible manner.

SD900 features compact, with a payload of 8KG, a maximum operating radius of 919mm, and an IP67 protection rating

●产品特点 Features

- ▶ High repeat positioning accuracy
- ▶ Stable performance
- ▶ Fast running speed
- ▶ Universal performance
- ▶ Full-machine IP67 protection class

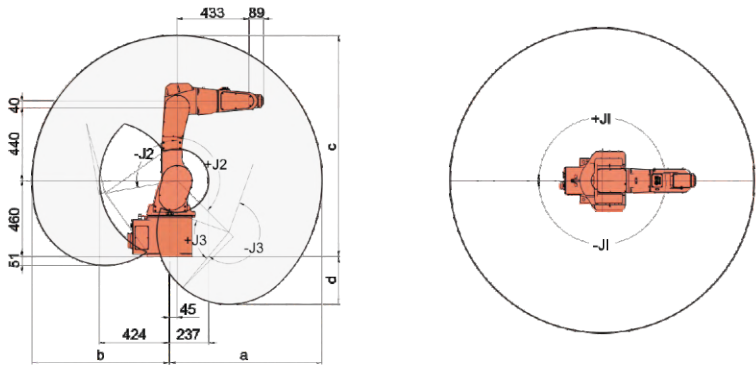
●产品应用 Application

- ▶ Material handling and palletizing
 1. Good economy
 2. Excellent beat performance
 3. The whole machine has IP67 protection rating
- ▶ Grinding, polishing, glue
 1. Excellent operating accuracy
 2. Long continuous and stable running time



●工作空间 Working Space

a	b	c	d
919	829	1334	286



●技术指标 Principal Data

型号 Model		SD900
手腕额定负载 Wrist Rated Payload		8 kg
最大工作半径 Max Working Radius		919 mm
自由度 DOF		6
关节速度 Max Speed	J1	335° /s
	J2	280° /s
	J3	370° /s
	J4	345° /s
	J5	375° /s
	J6	650° /s
关节范围 Max Operation Area	J1	± 180°
	J2	+135° ~ -100°
	J3	+70° ~ -220°
	J4	± 175°
	J5	± 130°
	J6	± 360°
噪声 Working Noise		<80 dB(A)
运输、储存温度 Transport Storage Temperature		-25℃ ~ +55℃
关节允许负载力矩 Wrist Allowable Torque	J4	11.8 Nm
	J5	9.8 Nm
	J6	6.7 Nm
关节允许负载惯量 Wrist Allowable Torque	J4	0.3 kgm ²
	J5	0.25 kgm ²
	J6	0.1 kgm ²
重量 Weight		85 kg
重复定位精度 Position Repeat Accuracy		± 0.03mm
环境温度 Ambient Temperature		0 ~ 40℃

SA Series Welding Robot

Product Introduction

SA Series robots are compact, small and lightweight, ideal for welding application due to its high stability to finish welding job. It can realize high welding-path accuracy, considerably reduce welding cycle-time, and extend the lifetime of tubes and cables. In addition, SA Series robots can fit in narrow working space and can be floor mounted, inverted or on the wall in any angle.

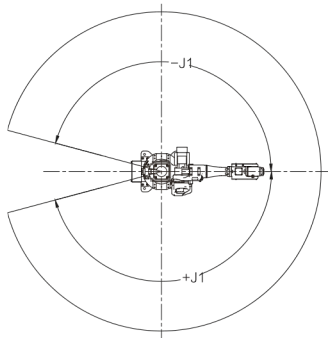
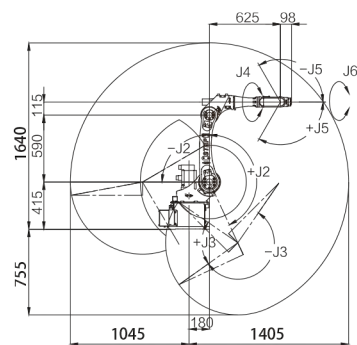
Product Application

▲ Arc Welding ▲ Assembly ▲ Packaging ▲ Cutting ▲ Loading and Unloading ▲ Material Handling

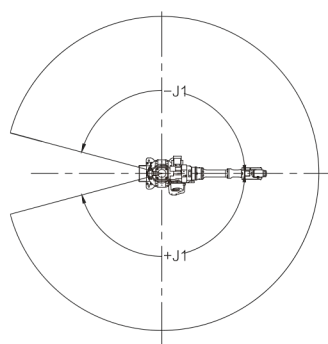
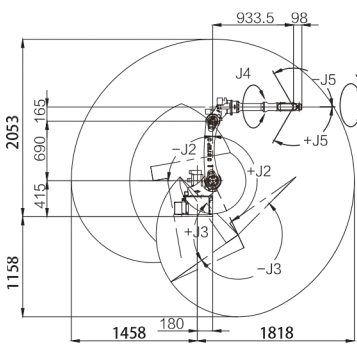
Working Space



SA1400



SA1800



Principal Data

Model	SA1400	SA1800
Wrist Payload	6 kg	8 kg
Max Working Radius	1405 mm	1818 mm
DOF	6	6
Position Repeat Accuracy	±0.05 mm	±0.05 mm

SR Series General Robot

Product Introduction

With compact structure, SR series robots are equipped with high-precision reducer, allowing the rotating arm can work flexibly within limited space with high speed, suitable for handling, palletizing, assembly etc. In addition, SR robots can be mounted flexibly.

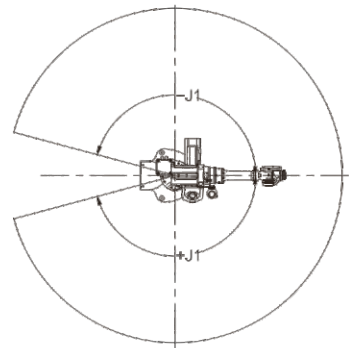
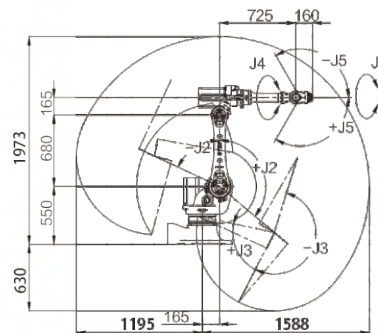
Product Application

▲ Assembly ▲ Spot Welding ▲ Bending ▲ Loading and Unloading ▲ Material Handling ▲ Laser Welding ▲ Packaging/Palletizing
▲ Cutting/Deburring

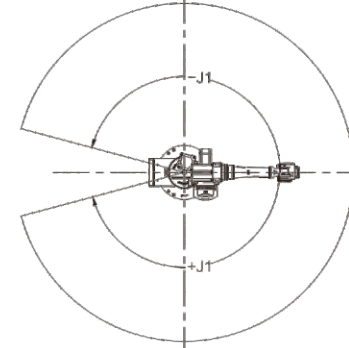
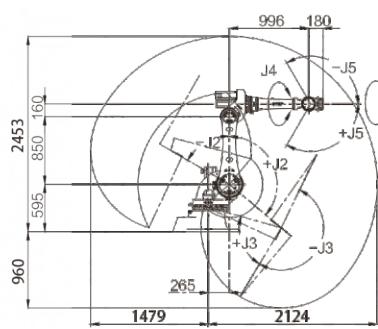
Working Space



SR20



SR50



Principal Data

Model	SR20	SR50
Wrist Payload	20 kg	50 kg
Max Working Radius	1588 mm	2124 mm
DOF	6	6
Position Repeat Accuracy	±0.05 mm	±0.25 mm

■ SP Series Palletizing Robot

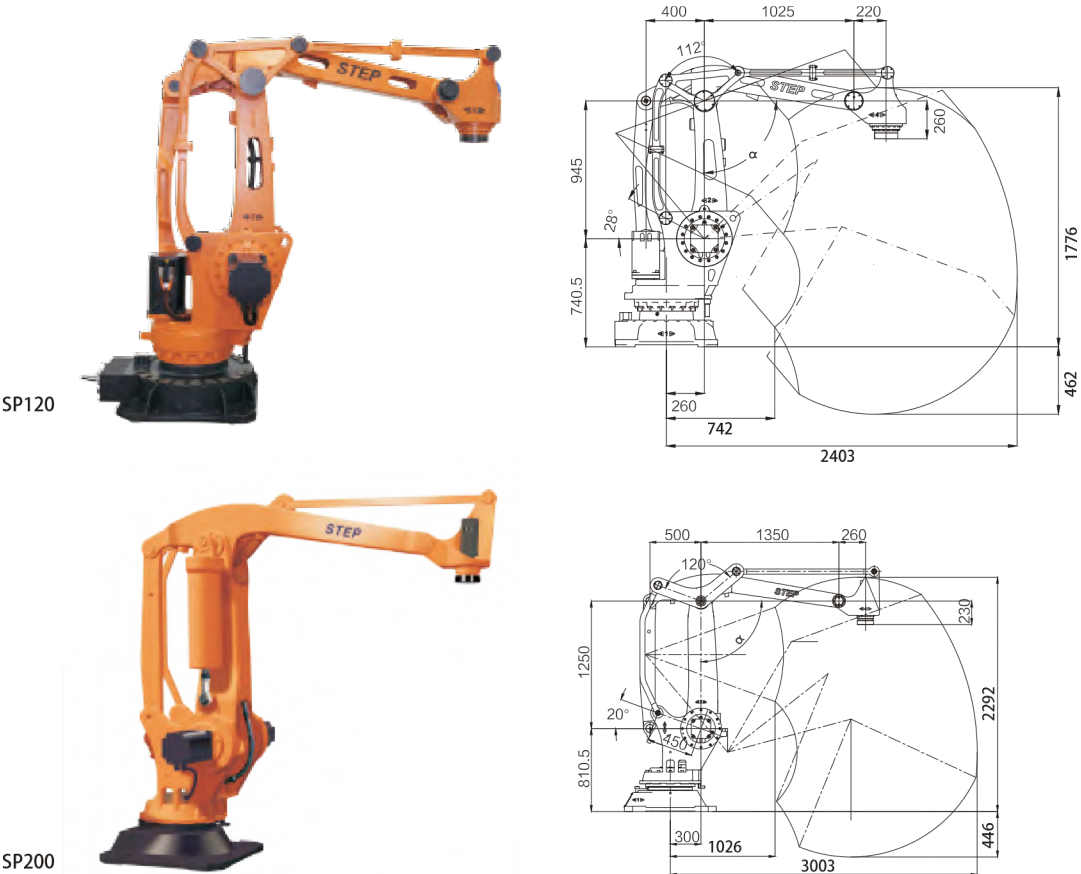
● Product Introduction

SP Series robots are 4-axis robots with simple structure, low failure rate. This model has many advantages such as easy to operate, saving energy, with less area occupation etc. Large payload capability enables the robot to handle materials easily which is suitable for heavy loading and large-scale working environment.

● Product Application

▲ Packaging/Palletizing ▲ Material Handling

● Working Space



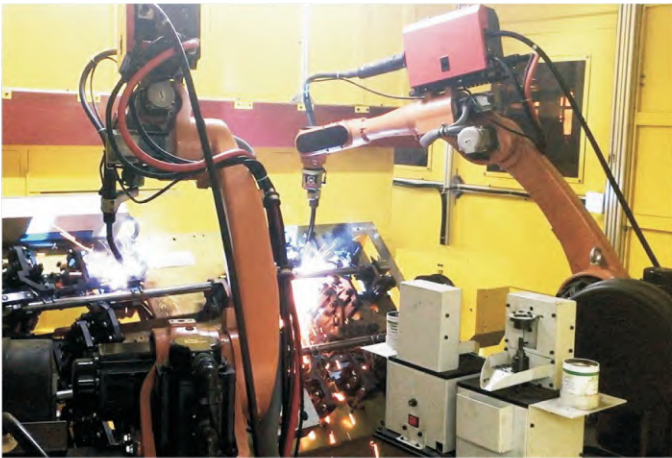
● Principal Data

Model	SP120	SP200
Wrist Paylaod	120 kg	200 kg
Max Working Radius	2403 mm	3003 mm
DOF	4	4
Position Repeat Accuracy	±0.2 mm	±0.5 mm

■ 3C, home appliances, new energy industry applications



■ Automotive parts industry



Car seat welding



Interior parts life test



White body bottom plate riveting



Lights coated with glue



Door thermal tightening



Tire handling

■ Food and Beverage Industry



Bag disassembly



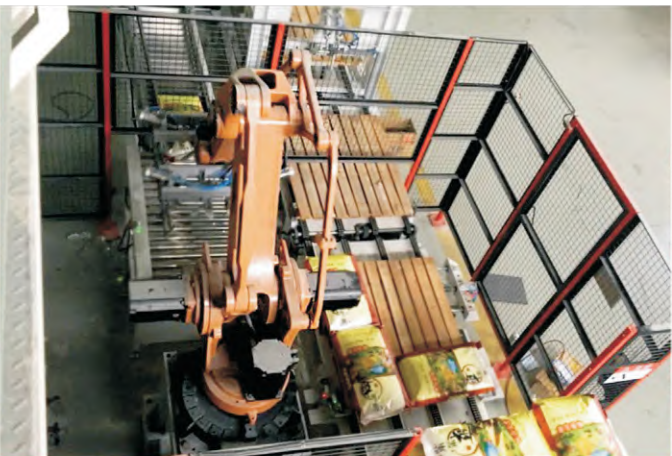
Multi-pallet multi-purpose decode sands



Drug palletizing



Orbital Line High-Speed Decoding



Feed palletizing



Boxes, barrels, bags multi-form handling

■ Metalworking industry



CNC machine loading and unloading



CNC machine tool trans-order production



Laser cutting



Tool grinding



Elevator door panel reinforced hamstring welding



Sheet metal bends

■ Full automatic production line application



Elevator door panel automation production line



Elevator door panel automation production line



CNC machine tool automation production line



Automotive front floor flexible spot welding

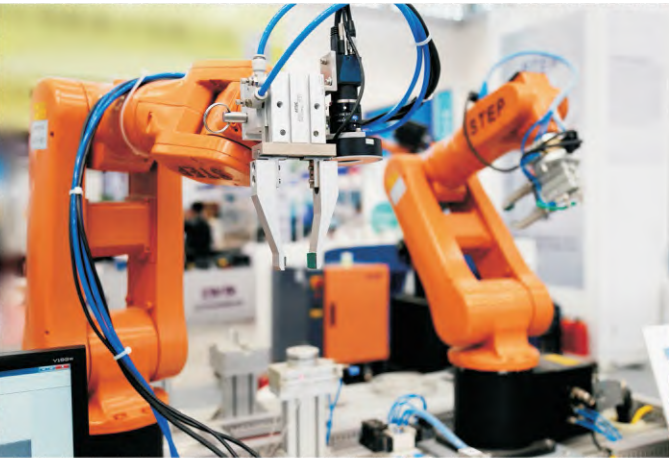


Frame assembly welding

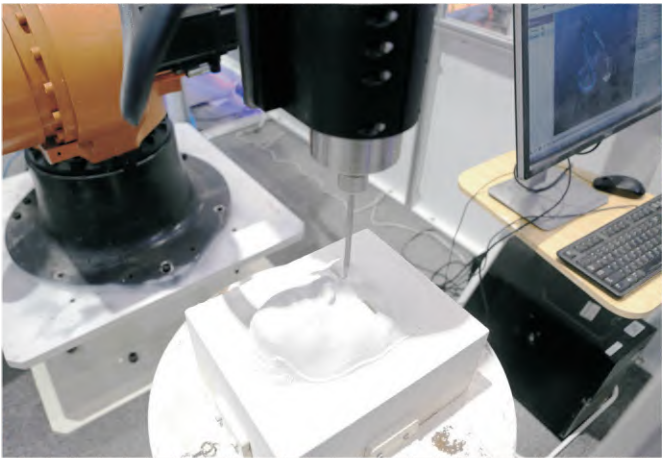


Metal palletizing

Education, science and public welfare application cases



Robotics Teaching Platform



Robot sifts in portraits



Robotic Calligraphy



Five Chess Man Machine Battle



Robotic two-machine collaboration



Robot drawing

Robot selection table

Model		SD500E	SD700E	SD900	SA1400	SA1800	SR8	SR20	SR50E	SR165	SR210	SP120	SP200
Freedom of motion		6 axis	6 axis	6 axis	6 axis	6 axis	6 axis	6 axis	6 axis	6 axis	6 axis	4 axis	4 axis
Load capacity (kg)		3	3	8	6	8	8	20	50	165	210	120	200
Joint speed (°/s)	J1	370	245	335	180	150	180	170	140	100	95	145	120
	J2	370	185	280	180	150	180	170	120	80	85	110	120
	J3	430	290	370	200	160	160	152	120	110	95	120	120
	J4	300	300	345	450	360	360	350	220	150	125	300	300
	J5	460	460	375	320	320	320	333	220	150	125	—	—
	J6	600	600	650	450	360	450	600	320	210	190	—	—
Joint range (°)	J1	±170	±170	±180	±165	±165	±165	±165	±160	±165	±165	±165	±180
	J2	±110	±110	+135~-100	+155~-90	+155~-90	+155~-90	+155~-90	+130~-60	+85~-50	+85~-50	+85~-40	+75~-40
	J3	+40~-220	+40~-220	+70~-220	+70~-200	+80~-190	+70~-200	+75~-200	+75~-195	+80~-150	+80~-130	+65~-65	+60~-50
	J4	±185	±185	±175	±170	±185	±170	±360	±360	±360	±360	±360	±360
	J5	±125	±125	±130	±120	±120	±120	±120	±110	±125	±120	—	—
	J6	±360	±360	±360	±360	±360	±360	±360	±360	±360	±360	—	—
Maximum operating radius (mm)		500	700	919	1405	1818	1405	1718	2124	2586	2683	2403	3003
Weight (kg)		28	30	85	143	160	143	235	575	1250	1250	1040	1820
Repeat positioning accuracy (mm)		±0.02	±0.03	±0.03	±0.05	±0.05	±0.05	±0.05	±0.1	±0.25	±0.25	±0.2	±0.5
Installation mode		front, reverse, side							front				
Arm form vertical		multi-joint											
Installation environment	ambient temperature	(0~40) °C											
	relative humidity	Below 75% RH (short term 95% RH)											
	vibration	4.9m/s ² following											
	other	robot installation must be kept away: flammable, corrosive liquids, gases, electrical interference											