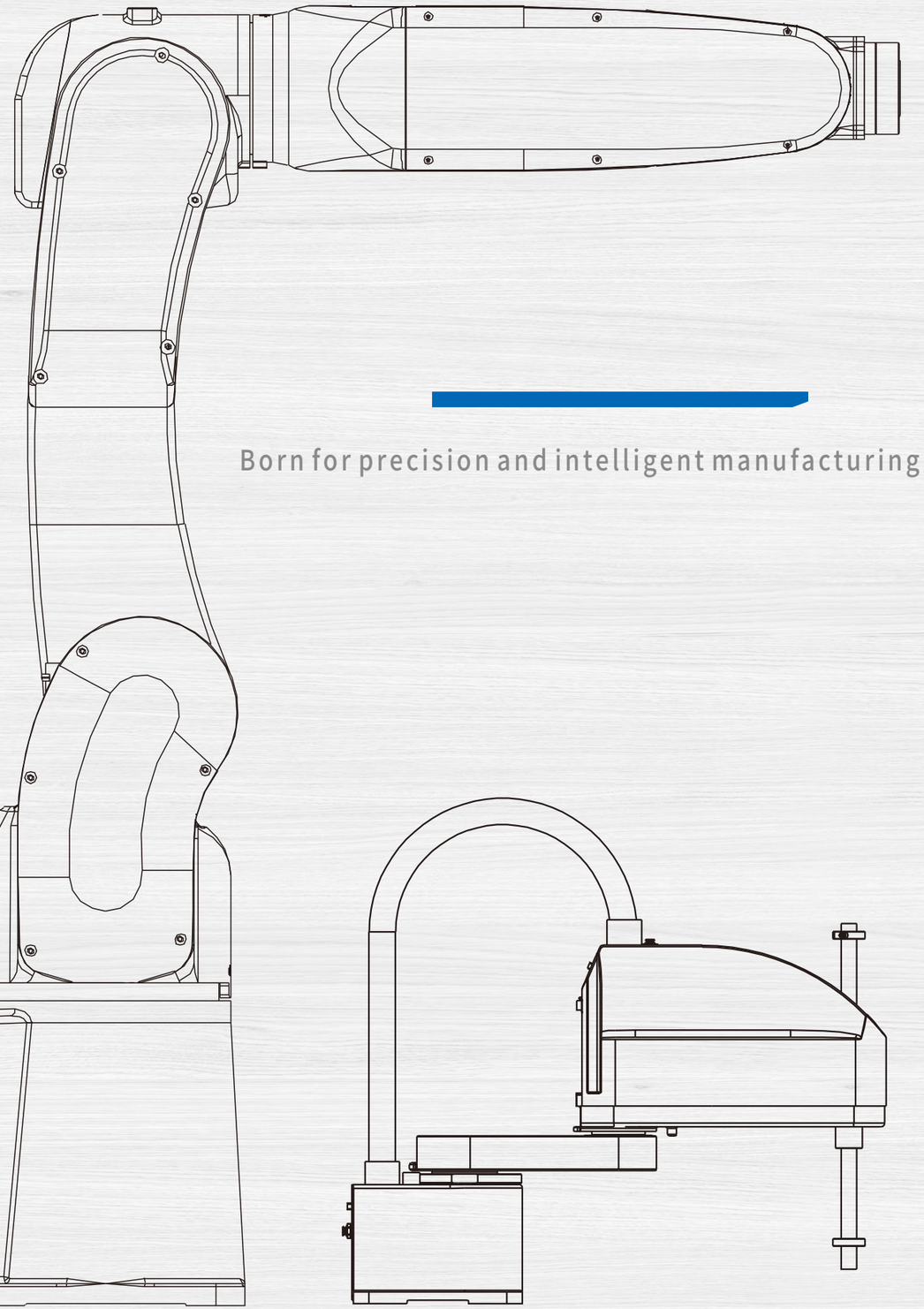
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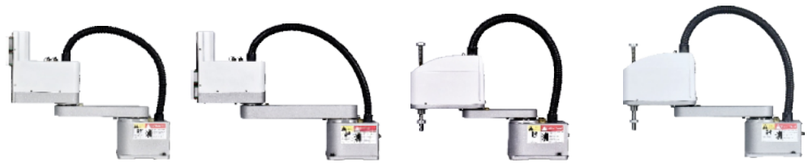


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SHENZHEN TROY Intelligent Robotics Co., Ltd.

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List of three-axis and four-axis robots of Faskye





model			FT6815	FT7815	FS4315	FS5315
Number of axes			3	3	4	4
Arm length			555mm	655mm	400mm	500mm
Standard cycle time			0.67s	0.67s	0.39s	0.4s
Rated/maximum load			5kg/8kg	5kg/8kg	1kg/3kg	1kg/3kg
Repetitive positioning accuracy			±0.015mm	±0.015mm	±0.01mm	±0.01mm
Maximum speedd	J1	Arm length	300mm	400mm	200mm	300mm
		Rotation range	±125°	±125°	±130°	±130°
	J2	Arm length	255mm	255mm	200mm	200mm
		Rotation range	±140°	±140°	±140°	±140°
	J3	trip	150mm	150mm	150mm	150mm
	J4	Rotation range	-	-	±360°	±360°
maximumfunctionspeed	J1 and J2 axis synthesis		5300mm/s	5500mm/s	6500mm/s	7300mm/s
	J3		1350mm/s	1350mm/s	1600mm/s	1600mm/s
	J4		-	-	2400°/s	2400°/s
Maximum downforce of J3 axis			240N	240N	100N	100N
Allowable inertia moment of J4 axis		rated	-	-	0.005kg.m²	0.005kg.m²
		maximum	-	-	0.05kg.m²	0.05kg.m²
Body weight			20kg	22kg	13.3kg	14.3kg

FS5A20	FS6A20	FS7A20	FS8B30	FS10B30
4	4	4	4	4
500mm	600mm	700mm	800mm	1000mm
0.42s	0.4s	0.42s	0.45s	0.47s
5kg/10kg	5kg/10kg	5kg/10kg	10kg/20kg	10kg/20kg
±0.015mm	±0.015mm	±0.015mm	±0.025mm	±0.025mm
200mm	300mm	400mm	400mm	600mm
±125°	±130°	±125°	±135°	±135°
300mm	300mm	300mm	400mm	400mm
±140°	±140°	±140°	±140°	±140°
200mm	200mm	200mm	300mm	300mm
±360°	±360°	±360°	±360°	±360°
7100mm/s	7900mm/s	8100mm/s	6500mm/s	6900mm/s
2000mm/s	2000mm/s	2000mm/s	1350mm/s	1350mm/s
1500°/s	2000°/s	1500°/s	1500°/s	1500°/s
240N	240N	240N	380N	380N
0.005kg.m²	0.005kg.m²	0.005kg.m²	0.1kg.m²	0.1kg.m²
0.2kg.m²	0.2kg.m²	0.2kg.m²	0.9kg.m²	0.9kg.m²
22.3kg	24.3kg	24.8kg	34.6kg	38.3kg



FT6815 (FT7815)

Arm length	555mm (655㎜)
load	5kg/8kg
Cycle time	0.67S
Repetition accuracy	±0.015mm

Joint parameters

Joint / Content	J1	J2	J3
Maximum speed	5300mm/s		1350mm/s
Maximum range	±125°	±140°	/
Motor power	750W	400W	400W
Joint length	300mm (400mm)	255mm	150mm
Body weight	20kg (22kg)		

Electrical parameters

User interface	15DB (1-14#) 4pin 7pin
User IO	24input；12output
User gas circuit	Φ6x4
Installation method	Formal wear



FS4315

Arm length	400mm
load	1kg/3kg
Cycle time	0.39S
Repetition accuracy	±0.01mm

Joint parameters

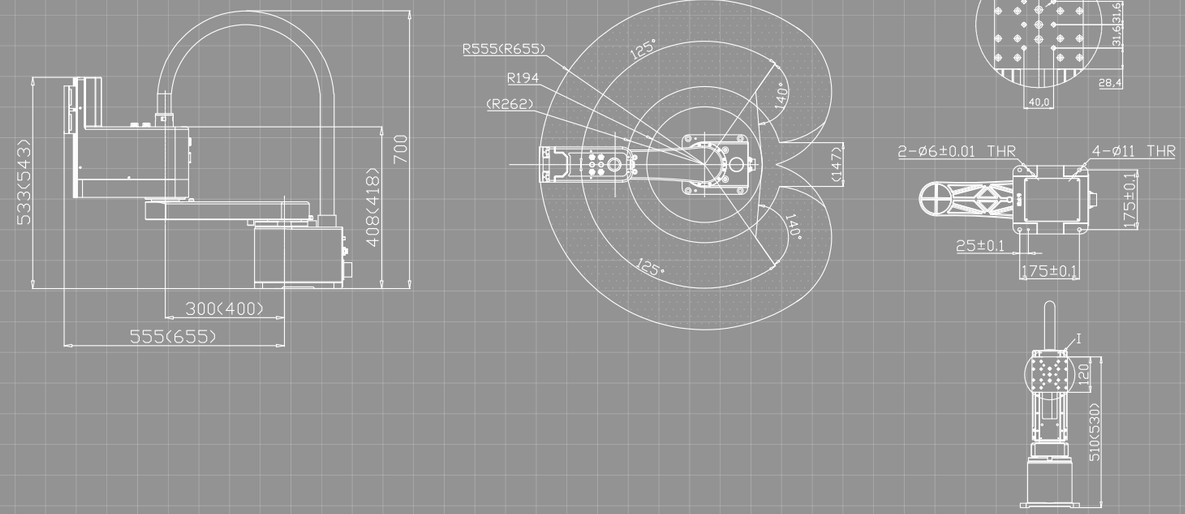
Joint / Content	J1	J2	J3	J4
Maximum speed	6500mm/s		1600mm/s	2400°/s
Maximum range	±130°	±140°	150mm	±360°
Motor power	400W	200W	100W	100W
Downforce			100N	
Body weight	13.3kg			

J4 moment of inertia rated0.005kg·m2 maximum0.05kg·m2

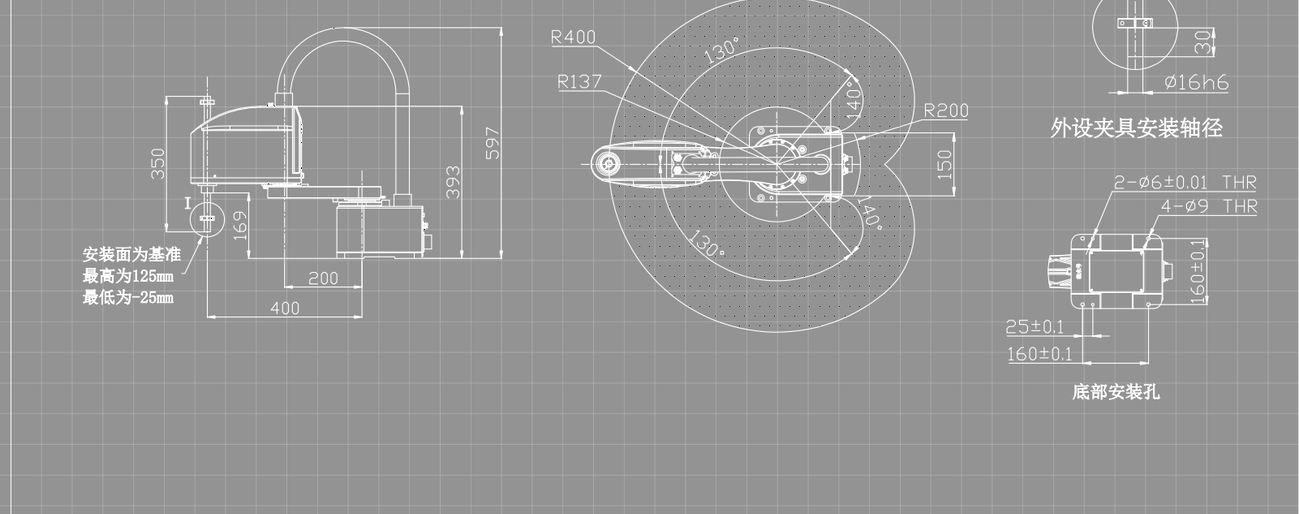
Electrical parameters

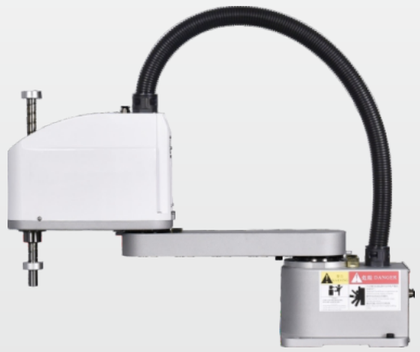
User interface	15DB (1-14#)
User IO	24input；12output
User gas circuit	Φ6x2
Installation method	Formal wear
Degree of protection	IP20

Dimensions and range of motion (Company：mm)



Dimensions and range of motion (Company：mm)





FS5315

Arm length	500mm
load	1kg/3kg
Cycle time	0.40S
Repetition accuracy	±0.01mm

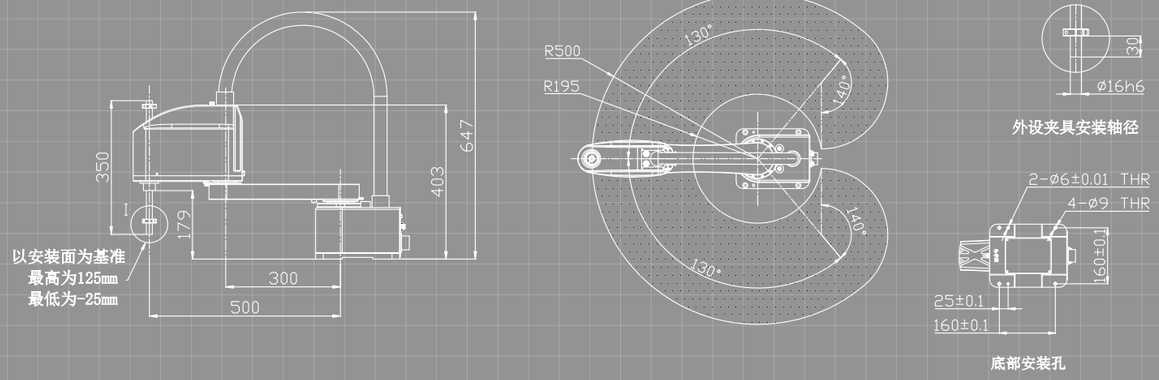
Joint parameters

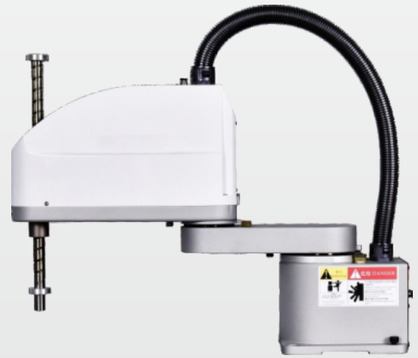
Joint / Content	J1	J2	J3	J4
Maximum speed	7300mm/s		1600mm/s	1500°/s
Maximum range	±130	±140°	150mm	±360°
Motor power	400W	200W	100W	100W
Downforce			100N	
Body weight	14.3kg			

J4 moment of inertia rated0.005kg·m2 maximum0.05kg·m2

Electrical parameters		
	User interface	15DB (1-14#)
	User IO	24input；12output
	User gas circuit	Φ6x2
	Installation method	Formal wear
	Degree of protection	IP20

Dimensions and range of motion (Company：mm)





FS5A20

Arm length	500mm
load	5kg/10kg
Cycle time	0.42S
Repetition accuracy	±0.015mm

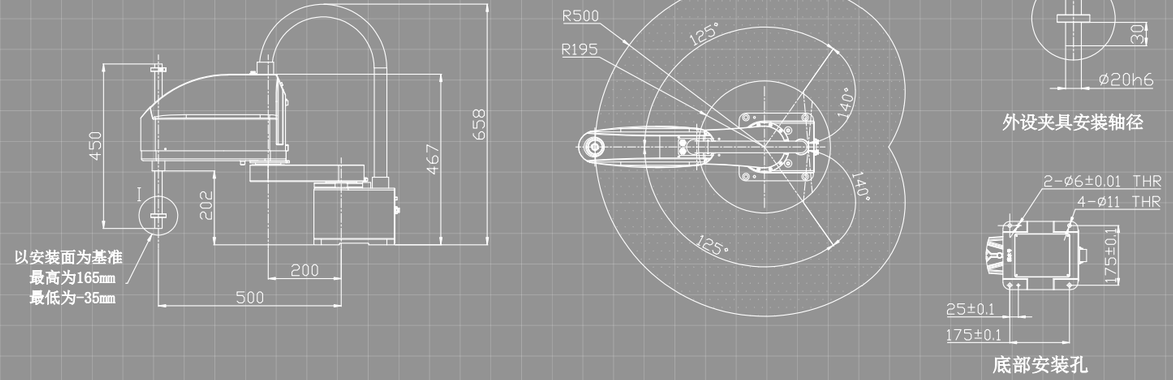
Joint parameters

Joint / Content	J1	J2	J3	J4
Maximum speed	7100mm/s		2000mm/s	1500°/s
Maximum range	±125°	±140°	200mm	±360°
Motor power	750W	400W	200W	200W
Downforce			240N	
Body weight	23.3kg			

J4 moment of inertia rated0.005kg·m2 maximum0.2kg·m2

Electrical parameters		
	User interface	15DB (1-14#)
	User IO	24input；12output
	User gas circuit	Φ6x2
	Installation method	Formal wear
	Degree of protection	IP20

Dimensions and range of motion (Company：mm)





FS6A20

Arm length	600mm
load	5kg/10kg
Cycle time	0.40S
Repetition accuracy	±0.015mm

Joint parameters

Joint / Content	J1	J2	J3	J4
Maximum speed	7900mm/s		2000mm/s	1500°/s
Maximum range	±130°	±140°	200mm	±360°
Motor power	750W	400W	200W	200W
Downforce			240N	
Body weight	23.3kg			

J4 moment of inertia rated0.005kg·m2 maximum0.2kg·m2

Electrical parameters		
	User interface	15DB (1-14#)
	User IO	24input;12output
	User gas circuit	Φ6x2
	Installation method	Formal wear
	Degree of protection	IP20



FS7A20

Arm length	700mm
load	5kg/10kg
Cycle time	0.42S
Repetition accuracy	±0.015mm

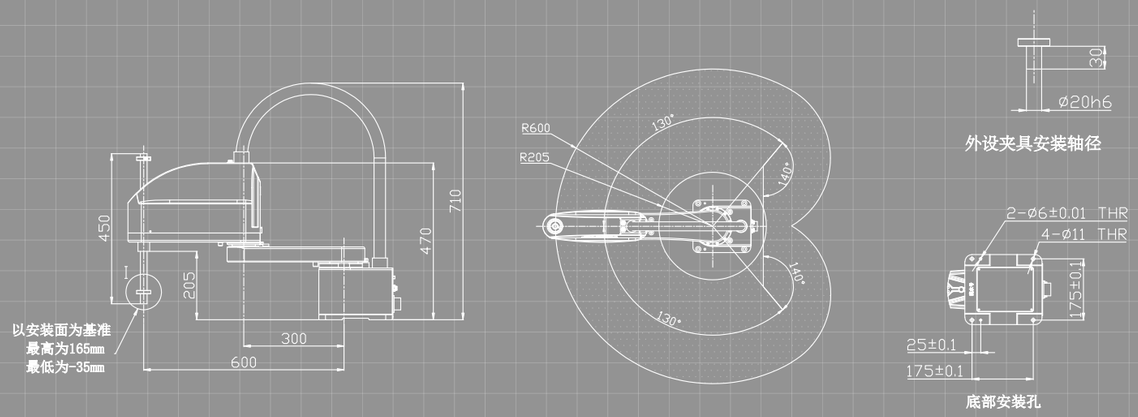
Joint parameters

Joint / Content	J1	J2	J3	J4
Maximum speed	8100mm/s		2000mm/s	1500°/s
Maximum range	±125°	±140°	200mm	±360°
Motor power	750W	400W	200W	200W
Downforce			240N	
Body weight	23.3kg			

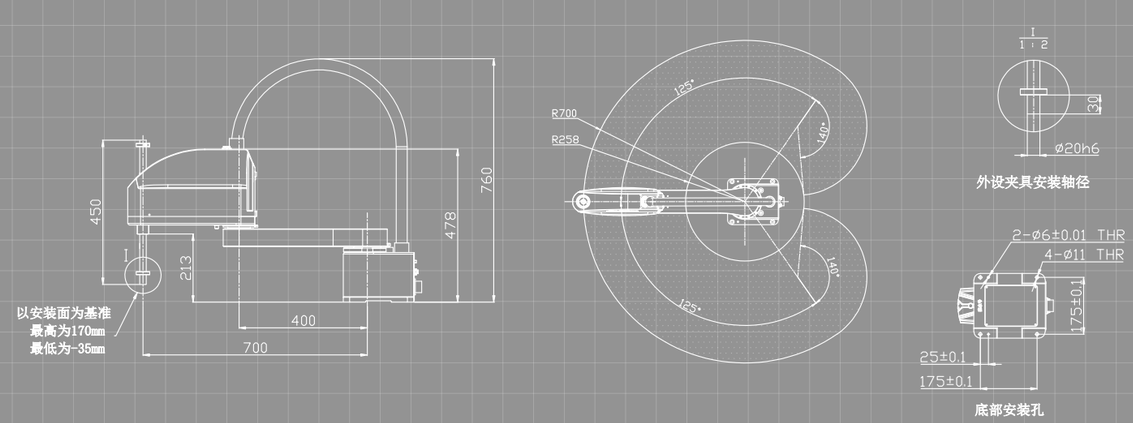
J4 moment of inertia rated0.005kg·m2 maximum0.2kg·m2

Electrical parameters		
	User interface	15DB (1-14#)
	User IO	24input;12output
	User gas circuit	Φ6x2
	Installation method	Formal wear
	Degree of protection	IP20

Dimensions and range of motion (Company：mm)



Dimensions and range of motion (Company：mm)





FS8B30

Arm length	800mm
load	10kg/20kg
Cycle time	0.45S
Repetition accuracy	±0.025mm

Joint parameters

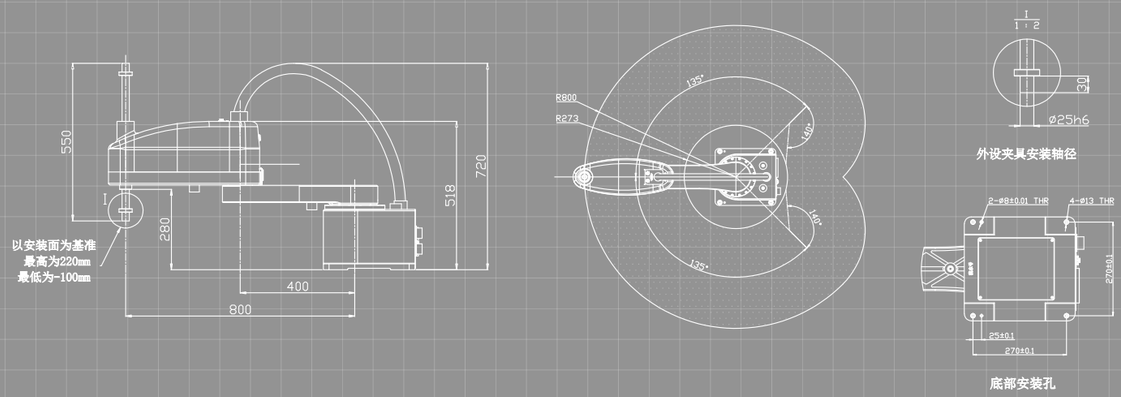
Joint / Content	J1	J2	J3	J4
Maximum speed	6500mm/s		1350mm/s	1500°/s
Maximum range	±135°	±140°	300mm	±360°
Motor power	1000W	750W	400W	400W
Downforce			240N	
Body weight	34.6kg			

J4 moment of inertia rated0.1kg·m2 maximum0.9kg·m2

Electrical parameters

User interface	15DB(1-14#)
User IO	24input;12output
User gas circuit	Φ6x2
Installation method	Formal wear
Degree of protection	IP20

Dimensions and range of motion (Company:mm)





FS10B30

Arm length	1000mm
load	10kg/20kg
Cycle time	0.47S
Repetition accuracy	±0.025mm

Joint parameters

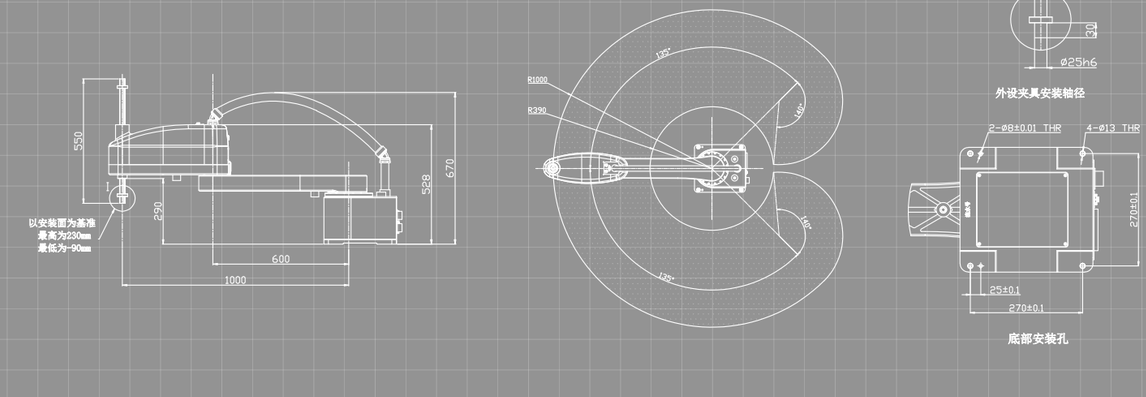
Joint / Content	J1	J2	J3	J4
Maximum speed	6900mm/s		1350mm/s	1500°/s
Maximum range	±130°	±140°	300mm	±360°
Motor power	1000W	750W	400W	400W
Downforce			240N	
Body weight	28.3kg			

J4 moment of inertia rated0.1kg·m2 maximum0.9kg·m2

Electrical parameters

User interface	15DB(1-14#)
User IO	24input;12output
User gas circuit	Φ6x2
Installation method	Formal wear
Degree of protection	IP20

Dimensions and range of motion (Company:mm)



Control cabinet



Three axis and four axis robot control cabinet

Model		FK400	FK700	FK1000
Power Supply	Voltage	三相或单相220V_{AC}	三相或单相220V_{AC}	三相220V_{AC}
		单相/三相: 200 ~ 230 V_{AC}, -15%~10%	单相/三相: 200 ~ 230 V_{AC}, -15%~10%	三相: 200 ~ 230 V_{AC}, -15%~10%
	Control power	24V_{DC}, -10%~10%		
	Input curren(3PH) (Arms)	8.1	12.4	16.4
	Input curren (1PH) (Arms)	14.8	23.8	-
	连续输出电流 (单位 : Arms)	2.6	5.1 (每轴)	7.3(J1.J2) / 5.1(J3.J4)
尺寸 (W) x (H) x (D) mm		175mm x 300mm x 159mm / 5.6kg		
Cooling mode		Fan cooling		
Encoder resolution number		20-bit (1280000 p/rev)		
Encoder analytic number main circuit control mode		SVPWM控制		
Control mode		Manual automatic		
Regenerative resistance		Internal resistance		
Robot control	language	IEC61131-3 PLC 、NC-code		
Input and output	I/O	standardI/O:24Input ; 12output systemI/O:8Input ; 8output		
	Brake output	4		
Communication interface	Ethernet	1		
	RS-232 / RS-485	1		
	DMCNET	1		
	USB Host	1		
Environmental specifications		功率组合	温度限制	功率组合	温度限制	功率组合	温度限制
	Maximum temperature limit	-	-	750 W × 4轴	40°C	-	-
		400 W × 2轴 200 W × 2轴	55°C	750 W × 2轴 400 W × 2轴	45°C	1000 W × 2轴 750 W × 2轴	40°C
		200 W × 4轴	55°C	400 W × 4轴	50°C	750 W × 4轴	40°C
		200 W × 2轴 100 W × 2轴	55°C	400 W × 2轴 200 W × 2轴	55°C	750 W × 2轴 400 W × 2轴	45°C
	Storage temperature	-20°C ~ 65°C					
	humidity	0 ~ 90% RH 以下 (不结露)					
	IP	IP20					



Six axis robot control cabinet(FR900)

Project	Explain
Number of control axes	4/6
Overall dimensions	L400*W280*H165(mm)
Box weight	8kg
Cable length	power cord3m，Teaching pendant line5m
Power specifications	AC220V 50/60Hz
Encoder control mode	EtherCAT TCP/IP
Communication interface	RS485/RS232/LAN/PWM/HDSI/EXTENC
System IO	Input8，output8
User IO	Input32，output16
Degree of protection	10-85%, IP20



Six axis robot control cabinet (FR1440/1700/1840/2010/2050)

Project	Explain
Number of control axes	6
Overall dimensions	L650*W495*H580(mm)
Box weight	60kg
Cable length	power cord3m，Teaching pendant line5m
Power specifications	AC220V（AC380V） 50/60Hz
Encoder control mode	EtherCAT TCP/IP
Communication interface	RS485/RS232/CAN/USB
System IO	Input16，outpu16
User IO	
Degree of protection	10-90% IP20

Industrial applications

Flexible vibrating disc sorting

1. Project overview: FS4315 robot is equipped with dual vision system to sort objects.
2. Process flow: The material in the silo is transported to the flexible vibration plate, and the flexible vibration plate shakes the materialThe robot man triggers the visual system to take photos, and the robot receives the visual position information to take materialsThe tool coordinates above the lower camera shall be corrected, and then placed or assembled at the required position.
3. Application precision: ± 0.05mm.
4. Running time: 1.5~1.8S5. Equipment advantage: the whole line efficiency beat is increased by 10%. Save 2 workers, and recover the cost ofThe service life of the equipment is more than 3 years. The whole machine has high precision, high reliability and good productsThe rate increased by 8%.

Packaging industry

1. Project overview: FS6A20 robot is equipped with visual system for packaging and fitting.
2. Process flow: the leather shell machine sends the material to the visual camera for taking photos, and the manipulator takes the material to be fitted to pasteAbove the closing point, the position information sent by the visual recognition shell is received for fitting.
3. Application accuracy: ± 0.15mm
4. Running time: 1.5 ～ 2.5S5. Equipment advantage: the whole line efficiency beat is increased by 5%. 1~2 workers are saved and recovered in one yearThe service life of the equipment is more than 3 years. The whole machine has high precision, high reliability and improved product yield5%.

Notebook PCB assembly

Project introduction:Four axis robot and vision system are used in notebook PC PCB assembly. Take pictures with J2 axis camera, According to the previously set template, match and identify the PCB board to be installed in the feeding tray, and carry out tooling after pickingSecondary positioning, visual assembly after the linear module runs in placeScheme advantages:
1. Application precision: ± 0.03mm. Running time: 10S/piece
2. Increase the whole line efficiency by 25%, save 10 workers, recover the cost in 2 years, and use the equipmentThe service life is more than 5 years. The precision of the whole machine is high, the reliability of the equipment is high, and the product yield is increased by 2.5%.
Project composition: four axis robot, vision system, conveyor belt, linear slide rail, manipulator clamp, toolingFixture.

Mobile phone PCB assembly

Project introduction:The six axis robot takes photos of the PCB board and picks up the materials to the camera at the photo point for dynamic tool coordinate correctionThe robot will assemble after deviation correction.Scheme advantages:1. Application precision: ± 0.05mm, running time: 3s.2. The beat of the efficiency is increased by 10% compared with that of manual line finishing. Save 1 person in the work station, recover the cost and equipment in one yearThe service life is more than 6 years. The precision of the whole machine is high, the reliability of the equipment is high, and the product yield is increased by 2%.Scheme composition:Four axis robot, vision system, coaxial light source, robot pneumatic clamp, conveyor belt, robot bench.



Mobile phone metal cover plate assembly

The four axis robot is equipped with a dual vision system for flying racket assembly, and the robot moves to the set position for multi toolsReclaiming, after the completion of reclaiming, go to the Z axis above the camera to take photos and correct deviation, and finally the manipulator moves to the position to be installedThe camera recognizes the feature points of the mounting position and then assembles.1. The application accuracy is ± 0.06mm, and the running beat is 8s/set.2. Double vision automatic calibration, simple operation.3. The whole line efficiency beat is increased by 8%. Save one worker, recover the cost in one year, and use the equipment for more than 5 years.The equipment has high accuracy and reliability, and the product yield has been increased by 2%.Scheme composition: four axis robot, vision system, multi position suction cup clamp, feeding Feida, storage tray, conveyor beltComplete machine bench.

Adhesion of mobile phone accessories

Four axis robot with vision system for cell phone label pasting. The marking machine is used for stripping, and the robot sits with multiple toolsMark the system to take materials, install the camera upside down to correct the deviation, and then paste after the camera takes photos to identify the position of the material.Scheme advantages:1. Application precision: ± 0.05mm. Running time: 8~12S/set.2. Dual vision automatic calibration is simple.3. The whole line efficiency beat is increased by 3%. It saves 2-3 workers, recovers the cost in one year, and the service life of the equipment is more than 3 years.The whole machine has high precision and reliability, and the yield of products has been increased by 1.5%. Scheme composition: four axis robot, vision system, peeling machine, multi position suction cup, conveyor belt and tooling fixture.

Mobile phone glass handling

Project introduction:The four axis robot loads and unloads the mobile phone glass. After receiving the signal of the mobile phone glass in place, the robot grabs and stacks it neatly.Scheme advantages:1. Application precision: ± 0.5mm, running time: 2300~2600 pieces/H2. The whole line efficiency beat is increased by 20%, saving 2 workers, recovering costs in one year, and the service life of the equipment is more than 3 years.Scheme composition: four axis robot, suction cup clamp, conveyor belt and material tray.

Mobile phone precision screw lock

Project introduction:The robot mobile phone is locked with screws, and the suction type feed box is used for picking materials at a fixed point. The robot can take a visual photo to identify the locking hole position beforeTake materials and lock them according to the teaching point after taking materials.Scheme advantages:1. Application accuracy: ± 0.05mm, running beat: 1.5S/pcs, lock yield above 99.9%,2. The whole line efficiency beat is increased by 8%. Save 2 workers, recover the cost in one year, and use the equipment for more than 6 years.The precision of the whole machine is high, the reliability of the equipment is high, and the product yield is increased by 3%.Scheme composition: robot, vision system, intelligent electric screwdriver, suction type feeding box.

Industry customers

东方亮彩 DFLC

SKYWORTH 创维

LENS 蓝思科技

GREE 格力

oppo

CHINT 正泰电器

TCL

HUAWEI

TROY INTELLIGENT

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SUNWODA 欣旺达

美的 Midea