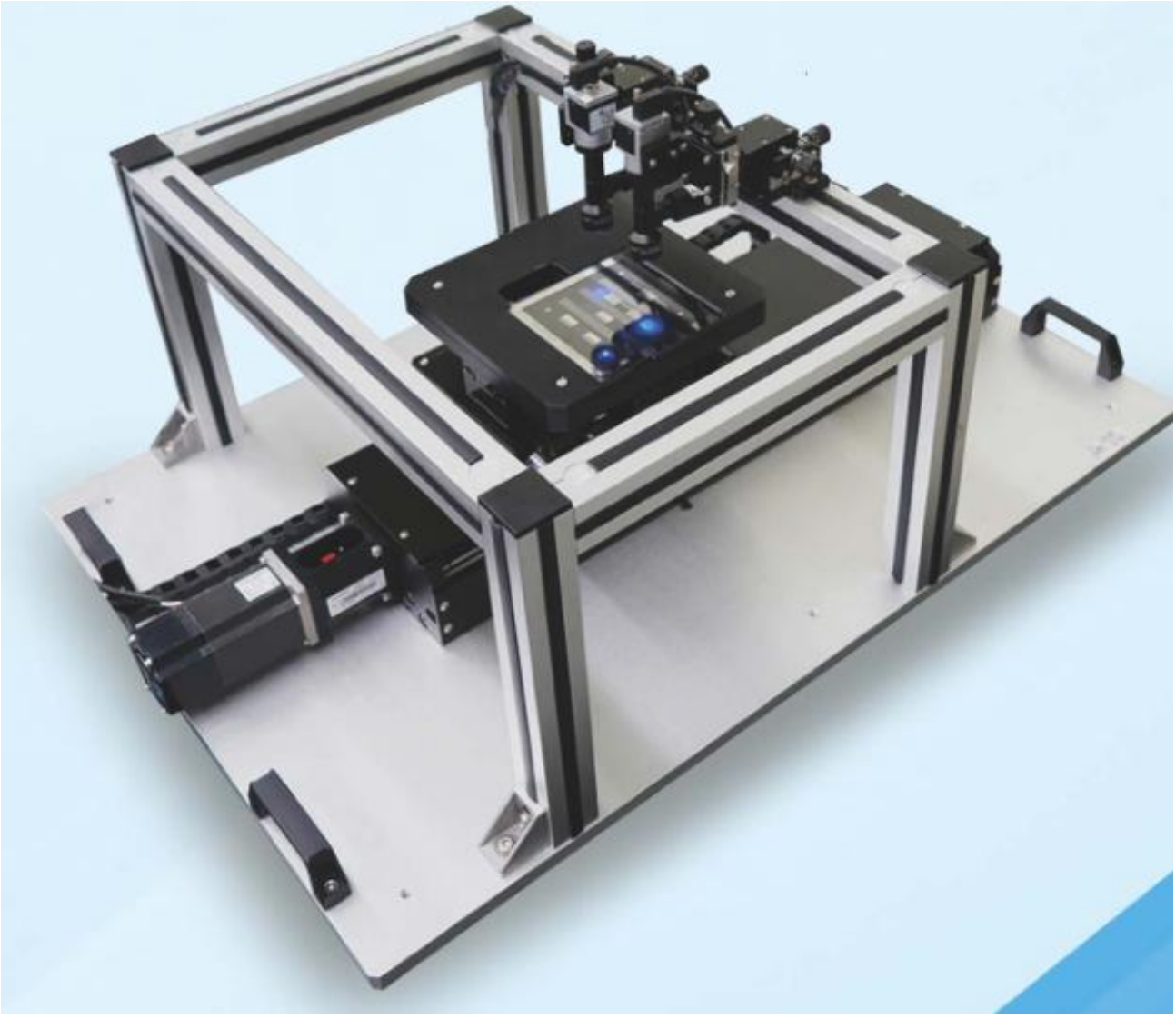
凯福科技
- Kaifull Technology -

Alignment accuracy
0.3μm
"Core" upgraded

PRECISION MOTORIZED STAGE
ALIGNMENT STAGE



Quick automatic correction
Only takes you 1 minute

Alignment precision 0.3μm

Meet online mold change requirements

ABOUT US

Guangdong Kaifull Electronic Technology Co., Ltd. is a high-tech enterprise that has been dedicated to the research, development, production, and sales of high-quality motion control products. The company adheres to the philosophy of being market- oriented and technology-driven, with a focus on innovation. After 16 years of diligent operation, it has become a leading domestic manufacturer of stepper motors, drivers, and related products.

Kaifull Technology has its own brands, namely 'Kaifull' and 'YARAK.' Its product range includes stepper motor drive systems, servo motor drive systems, brushless motor drive systems, planetary gearboxes, hollow rotary platforms, precision adjustment stages, alignment platforms, linear motors, and other series of products. These are widely used in industries such as 3C (computers, communications, and consumer electronics), CNC machine tools, medical equipment, laser engraving, textile printing, packaging machinery, electronic devices, robotics, lithium batteries, photovoltaics, and semiconductors.

The company has established production bases in Dongguan and Suzhou, equipped with strong research and development capabilities, advanced manufacturing equipment, and production processes. Rigorous testing methods ensure product quality and supply reliability. Additionally, the experienced sales and technical teams continuously enhance customer value through services, understanding customer needs, and tracking their development. For the past 16 years, Kaifull Technology has been committed to its mission of providing globally leading motion control solutions, aiming to earn the trust of every intelligent manufacturing factory through its products and services!

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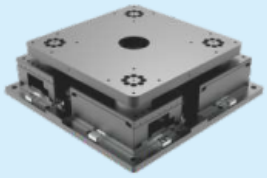
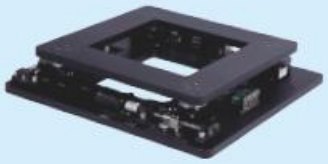
Alignment Platform



XXYG series



XXY series

XYR series

XXYE series

Product advantages

Module structuring

On the four-end planes between the base and the workbench, the XY-direction sliding tables are installed, and the special cross thick column box has module characteristics, implementing the function of XYθ structure.

High rigidity, high precision

The sliding table that constitutes the module uses cross roller guide rails, which achieve high precision and high rigidity after applying pre-pressing.

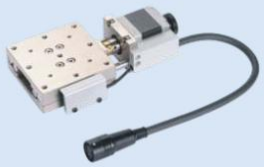
Ultra-thin, hollow structure

Support hollow, light and thin structures, and can be used as a visual or light source testing device. Easy to install, safe, highly reliably, long service life, requiring very little exception maintenance.

Complete sizes

100mm-1000mm, more suitable for higher accuracy and heavier loads.

Precision fine-tuning stage



Linear type

Horizontal lifting type

Rotating type

Swing type

Product advantages

Small size and compact structure

Small size and compact structure (the workbench can be small as 40*40, even smaller).

Flexible matching mode

Flexible matching mode (can flexibly configure 3-axis, 4-axis, 5-axis to achieve multidimensional motion control).

Support fully closed-loop control

Support full-closed loop control (used together with the grating ruler or encoder to achieve step full-closed loop control)

High positioning accuracy

High positioning accuracy (high-grade ball screw, with a maximum repeated positioning accuracy of ±0.3μm).

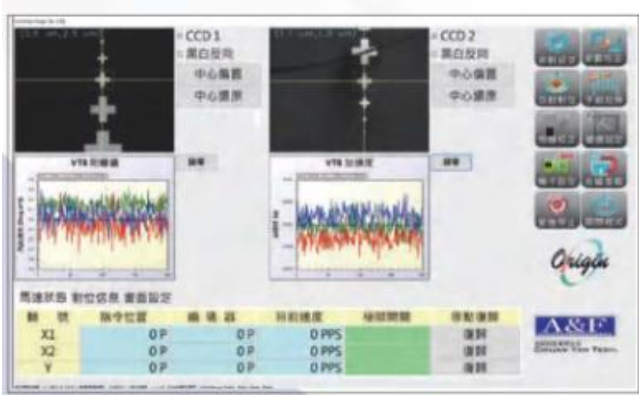
CHIUAN YAN TECHNOLOGY CO., LTD

Guangdong Kaifull Electronics Technology Co., Ltd

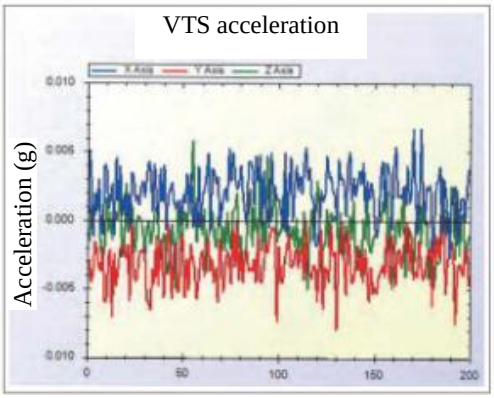
Precision Alignment Core Software

A&F Origin System

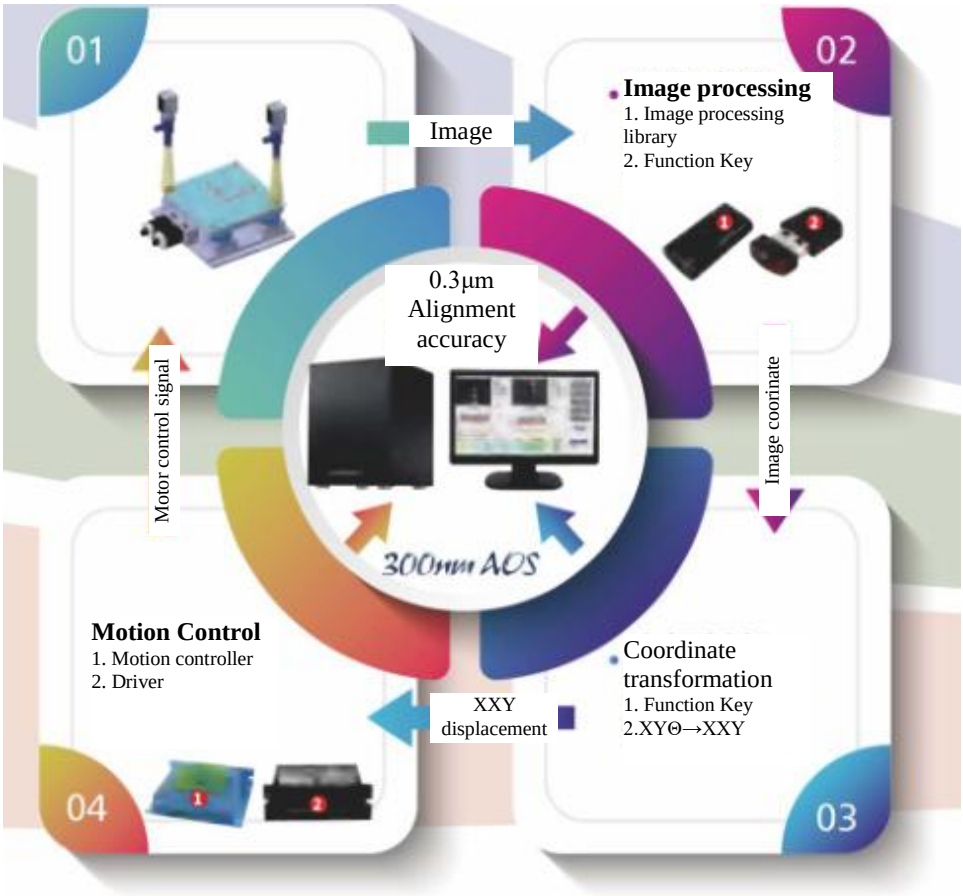
Main operation interface



A&F VTS data chart

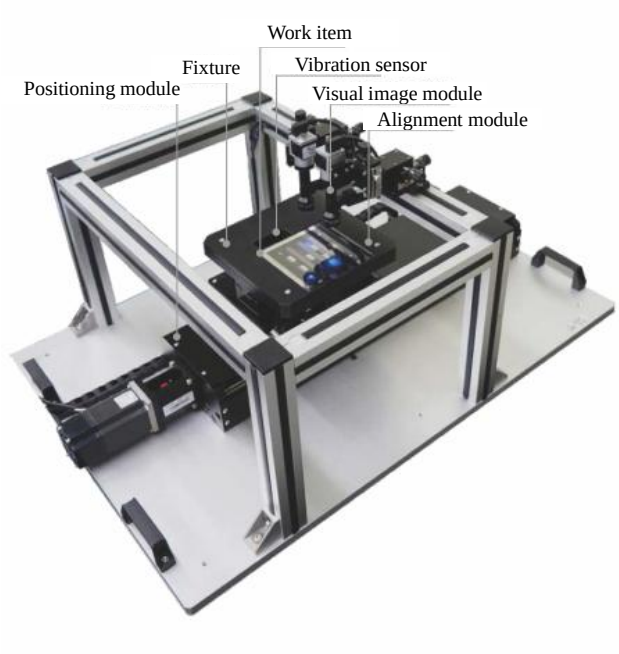


AOS Architecture Diagram



AOS (Alignment Origin System)

Precision alignment 0.3μm, real-time vibration monitoring and real-time notification



System function

◆ **Positioning module:** Move the positioning module to the receiving work item loading position, and then move it to the work item process workstation position.

◆ **Fixture:** Locate the work item on the positioning module, ensuring the reproducibility of the work item position meets the requirements.

◆ **Vibration sensor:** Vibration sensing and instant notification during process work to ensure process stability.

◆ **Visual image module:** Capture the logo image between two work items and transmit information.

◆ **Alignment module:** When the work item is in the process position, align it with the standard object to perform process work.

◆ **Work item:** Processed objects, tested objects, assembled objects, etc.

◆ **Vibration display panel:** The dynamic information of the alignment module monitored from the vibration sensor is displayed in a graphic easy to understand and view through software computation.

◆ **Operation panel:** AOS operation interface, parameter setting, parameter calibration, manual/automatic alignment, camera calibration, edge loop setting, axis card setting, golden key reloading, emergency stop, program shutdown, etc.

AOS advantages

◆ Integrated solution with XXY alignment platform hardware and optical image system Origin key

◆ Implement 0.3μm high-difficulty alignment technology

◆ Accumulate nearly 15 years of research and development technology

◆ Hardware patent and software trademark right

◆ Origin key professional authorization

◆ Application performance and rich experience

◆ High efficiency parameter calibration

Efficient **Stable** **Accurate**

Product Application

◆ Bonding

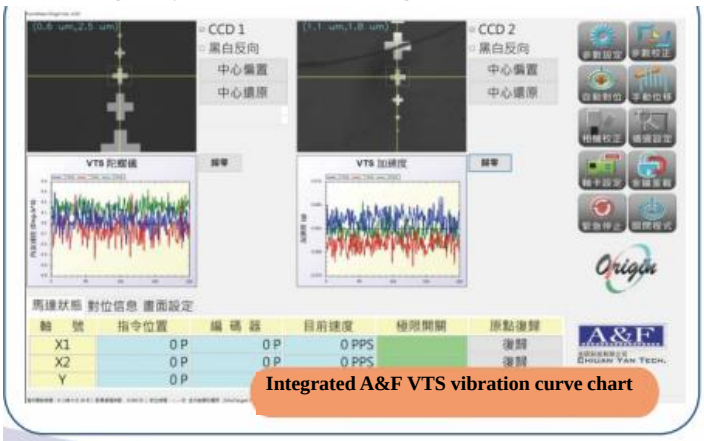
◆ Printing

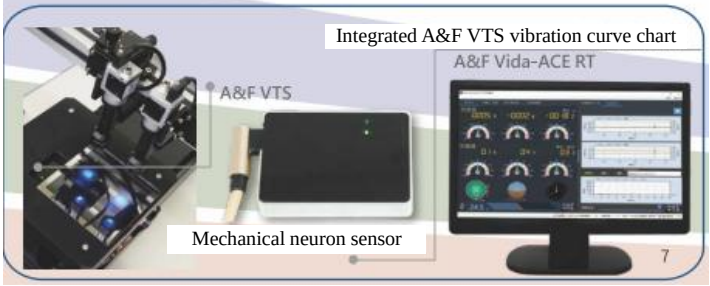
◆ Exposure

◆ Electrical test

◆ AOI

A&F Origin System Precision Alignment Core Software





AOS application description

Wafer probe test alignment

- Single-camera double-layer alignment mode
- Capture the double-layer coordinate positions for alignment
- Electrical test for horizontal lifting Z-rising

Prototype specification description

Alignment platform XXY130

Automatic lifting Z stroke 10mm

Alignment accuracy < 0.005mm

XYθ alignment inspection

- XYθ is suitable for wearable technology product manufacturing processes
- Check the small and large-angle range detection of articles

Prototype specification description

Alignment platform XYθ

Alignment accuracy <0.001mm

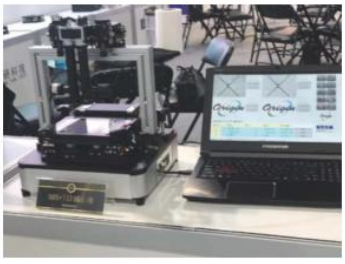
Middle-order 1μm alignment system

- General precision alignment level
- Printing application
- Soft board industry, mechanical precision assembly

Prototype specification description

Alignment platform XXY5M06

Alignment accuracy < 0.001mm



High-order 0.3μm alignment system,

- Micro LED market application
- Perfect alignment 0.3μm high accuracy and high quality

Prototype specification description

Alignment platform XXY5M06

Alignment accuracy < 0.0003mm

Large table surface alignment platform

- Suitable for table surfaces of different sizes or irregular table surfaces
- Multi-point support, large load, large table surface

Prototype specification description

Table size 1350*1500 (plate thickness 9t)

3 sets of power shafts and 17 sets of support shafts

Alignment accuracy < 0.005mm

New Arrival in 2024

Mechanical Operation Smoothness Detection System

Kaifull A&F Vida-Rotest

System Introduction

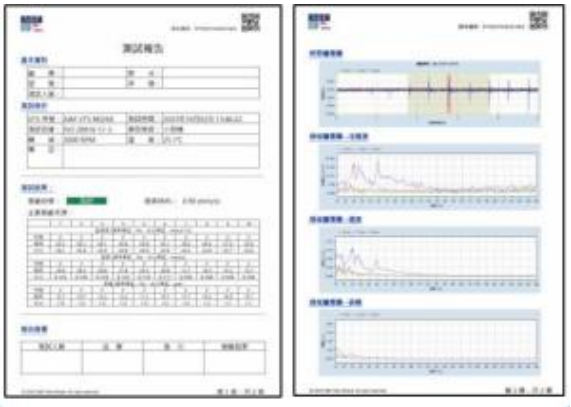
The A&F Vida-Rotest-mechanical operation smoothness detection system is based on the A&F VTS neuron sensor and is used for rapid inspection of the dynamic characteristics of the machine, equipment, and electric drive modules/mechanisms during operation (according to ISO 20816). Through three simple steps, it can quickly generate inspection reports, so that you can easily and quickly know the machine condition, make accurate decisions, and use it for product consistency inspection, grading, and classification. It is an indispensable partner in design, assembly, warranty, product quality control, and so on.

Complete test through three simple steps

System Features

- Easy to operate and quick to come online
- Automatic data analysis, use of multiple analysis tools
- Can switch the display of three frequency spectrums of speed, acceleration, and displacement
- Data extraction and establishment of test reports
- Automatic generation of test report numbers, easy to manage

Test Report



A&F VTS Mechanical Neuron Sensor

A&F VTS is an integrated sensor with a 32-bit built-in processor, and can measure such parameters as acceleration, angular velocity, vibration, levelness and inclination. It is very suitable for the adjustment, monitoring and state prediction of precision mechanical equipment, actuators, machines, equipment and structures.

VTS is lightweight, small, low-noise, portable, power-saving, plug and play, and can measure vibration levels up to VC-C. The support software with diversified functions enables VTS to be flexibly applied in various fields such as precision machinery, automotive, aviation, structural and civil engineering, and biomedicine, and assist in monitoring the performance and stability of different systems and structures. It is the best tool for monitoring, analysis, and optimization of machines, equipment, structures, and key components.

Product specification (VTS-B)			
Sensor	3-axis accelerometer + 3-axis gyroscope		
Bandwidth	250Hz		
Accelerometer	Measurement range: ±2g	Resolution: 0.061 mg/LSB	Noise: 90 μg/√Hz
Gyroscope	Measurement range: ±250dps	Resolution: 0.01 dps/LSB	Noise: 10 mdps/√ Hz
Measurement accuracy of θx and θy angles	±0.05 °[1]		

Note 1: It needs to be equipped with CHIUAN YAN release software.

Product Features

6-axis vibration measurement

Realize synchronous and real-time measurement of the accelerometer and the gyroscope.

Convenient transmission mode

Provide USB 2.0, BLE 5.0, and network connection [1], and quickly realize Industry 4.0 layout.

High-precision and high-accuracy quantity measurement

With built-in ambient temperature compensation function, it can also maintain low noise during long-distance transmission.

Diversification of software selection

Provide a variety of application software for customers to choose. Users can quickly develop personalized application software through VTSAPI.

Integrated circuit, low power consumption

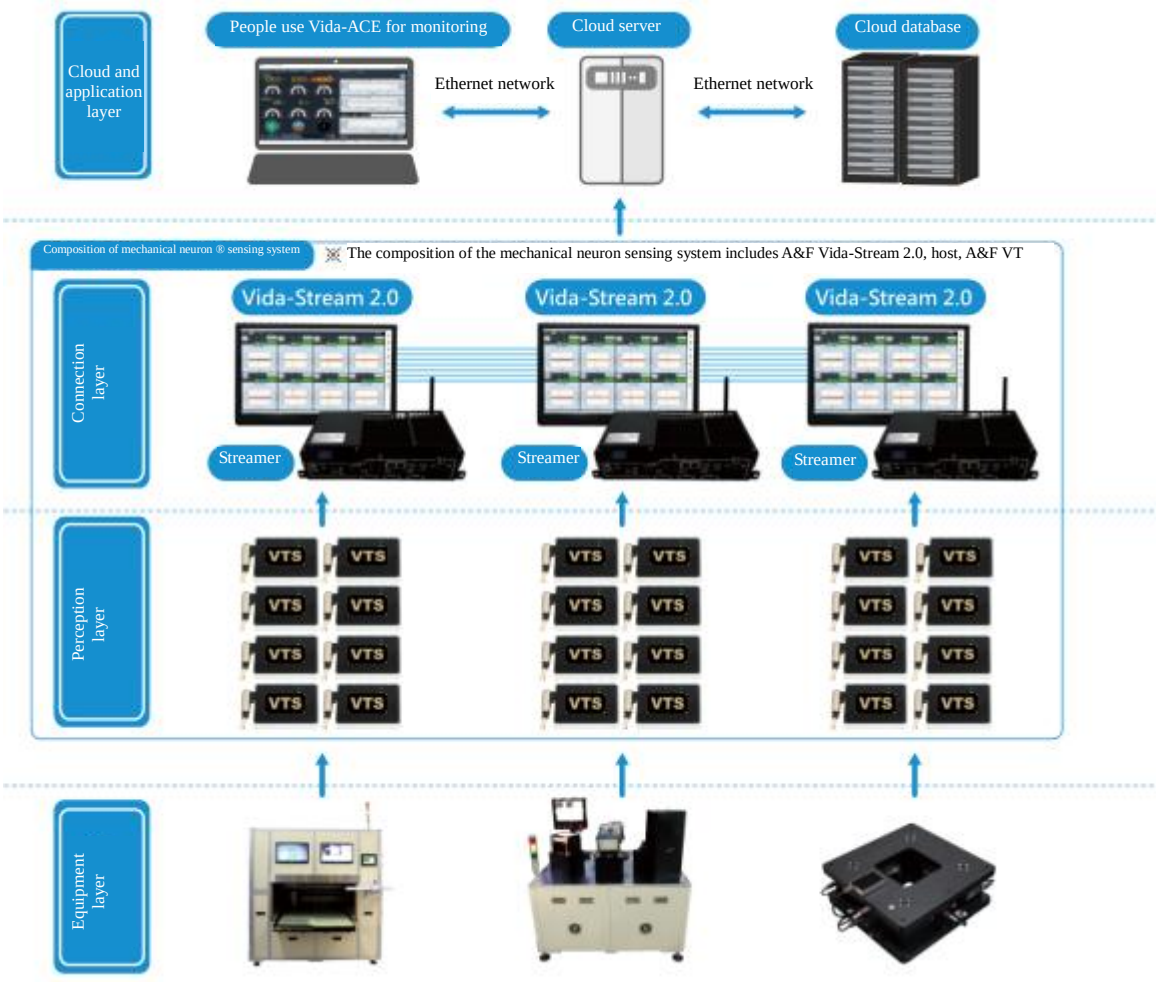
Equipped with Cortex-M4 processor, the integrated circuit provides stable data transmission not requiring additional data extractors.

Plug and play

It can be used in such operating systems as Windows8, Windows10, Windows11, and Linux without the need to install additional drivers.

Quickly establish a machine networking structure to achieve smart manufacturing and Industry 4.0

Integrating the application program Vida-Stream 2.0 developed by Kaifull Technology with a data streamer, one streamer can achieve up to 8 sets of A&F VTS machine networking architecture and upload data to the cloud database through Ethernet. It can help the industry quickly achieve the real-time status monitoring of mechanical equipment and build big data databases. The collected big data can be used by industry leaders to conduct backend data analysis, grasp the operational health status of machines and equipment, and complete predictive maintenance. Equipped with the Vida-ACERT developed by CHIUAN YAN Technology Co., Ltd., it makes it easy for users to implement remote connection with Vida-Stream2.0, and enable them to monitor the operation status of the machine anytime and anywhere.



A&F release software introduction

A&F Vida-Basic free software
Basic application software

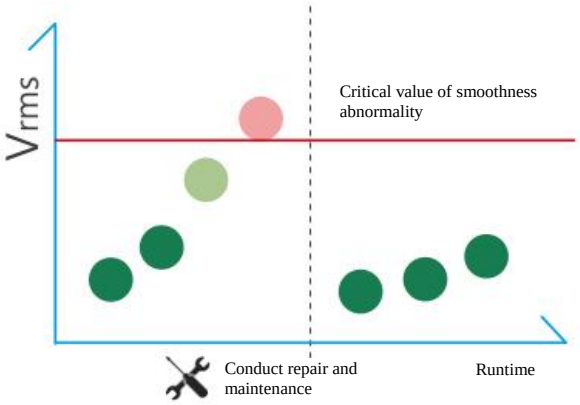
A&F Vida-ACE RT annual rent
Numerical value real-time visualization software

A&F Vida-Stream 2.0 annual rent
Data collection software specially developed for Industry 4.0 and smart manufacturing

A&F Vida-Rotest annual rent
Mechanical Operation Smoothness Detection Software

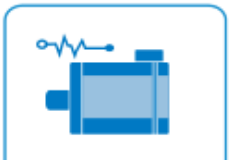
Application Examples

Through the changes in the operation smoothness of machines and equipment (according to ISO 20816 specifications), it can serve the purpose of predictive maintenance, and can also be used for product quality inspection or grading and classification.



Product Application


Monitoring of equipment and machine vibration changes

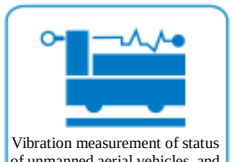

Servo adjustment of equipment and machine motors


Fourth and fifth-axis characteristic measurement

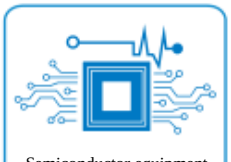

Audio measurement of speakers and musical instruments

Vibration test of mechanical equipment and transmission elements


Turntable characteristic measurement


Vibration measurement of status of unmanned aerial vehicles, and automatic guided vehicles/rail vehicles during movement

Integrating big data and AI technology to develop smart machines


Semiconductor equipment measurement

Semiconductor packaging	Lithography equipment	Laser processing	Wafer detection	AOI detection	Electronic element assembly
Precision dispensing	Life medicine	PCB drilling	Textile	Digital printing	Intelligent sorting
Luggage transport	High-speed bonding equipment	Food processing	Coordinate measuring machine	Precision grinding	Wire cutting
Ultra-high speed cutting	……				

Quick Indexing of Grating Closed-loop Precision Electric Fine-tuning Stage Product Catalog

60 series	P16			
Model	YK-L6020G-SGN-5-815	YK-HL6020G-SGN-5-815	YK-HL6030G-SGN-5-815	YK-HL6050G-SGN-5-815
Table surface size	60*60mm		60*70mm	60*80mm
Movement stroke	±10mm		±15mm	±25mm
Body weight	0.7kg	0.85kg		0.95kg
Lead screw parameters	Diameter 6mm, pitch 1mm	Diameter 8mm, pitch 1mm		
Material	SUS-440C			
Repetitive positioning accuracy	Grade G±0.3μm			
Drive current	1.2A			
Maximum speed	10mm/s			
Load	98N(10kgf)			
Motor	PKP523N12B (Oriental Motor)			

Quick Indexing of Precision Electric Fine-tuning Stage Product Catalog

			P23-P24	Linear type
Model	YK-L4015/YK-L4015-5	YK-L6015/YK-L6015-5	YK-L6020/YK-L6020-5	YK-L6030/YK-L6030-5
Number of phases	Two phases	Two phases/Five phases	Two phases/Five phases	Two phases/Five phases
Table surface size	40*40mm	60*60mm		60*70mm
Movement stroke	±7.5mm		±10mm	±15mm
Body weight	0.4kg	0.6kg		
Lead screw parameters	Diameter 6mm, pitch 1mm			
Material	SUS-440C			
Repetitive positioning accuracy	Two phases (Grade U±1μm/Grade P±3μm)·five phases (±0.5μm)			
Drive current	0.7A			
Maximum speed	10mm/s			
Load	98N(10kgf)			
Motor	28mm step			

				P27-P29		Enhanced linear type
Model	YK-HL6020/ YK-HL6020-5	YK-HL6030/ YK-HL6030-5	YK-HL6050/ YK-HL6050-5	YK-HL8020/ YK-HL8020-5	YK-HL8030/ YK-HL8030-5	YK-HL8050/ YK-HL8050-5
Number of phases	Two phases/Five phases	Two phases/Five phases	Two phases/Five phases	Two phases/Five phases	Two phases/Five phases	Two phases/Five phases
Table surface size	60*60mm	60*70mm	60*80mm		80*80mm	
Movement stroke	±10mm	±15mm	±25mm	±10mm	±15mm	±25mm
Body weight	0.75kg		0.85kg		1.1kg	
Lead screw parameters	Diameter 8mm, pitch 1mm					
Material	SUS-440C					
Repetitive positioning accuracy	Two phases (Grade U±1μm/Grade P±3μm) • five phases (±0.5μm)					
Drive current	0.7A					
Maximum speed	10mm/s					
Load	147N(15kgf)					
Motor	28mm step					

Quick Indexing of Precision Electric Fine-tuning Stage Product Catalog

Rotating type	P31			
Model	YK-R4017 YK-R4017-5	YK-R6015 YK-R6015-5	YK-R8016 YK-R8016-5	YK-R12016 YK-R12016-5
Number of phases	Two phases/Five phases	Two phases/Five phases	Two phases/Five phases	Two phases/Five phases
Table surface size	φ40mm	φ60mm	φ80mm	φ120mm
Movement stroke	±8.5 °	±7.5 °	±8 °	±8 °
Body weight	0.4kg	0.6kg	0.8kg	1.2kg
Lead screw parameters	Diameter 6mm, pitch 1mm			
Material	Aluminum alloy			
Repetitive positioning accuracy	Two phases (Grade U±0.005°/Grade P±0.01°) • five phases (±0.003°)			
Drive current	0.7A			
Maximum speed	50 °/s	35 °/s	25 °/s	20 °/s
Load	39.2N(4kgf)	49N(5kgf)		
Motor	28mm step			

Arc pendulum type	P36			
Model	YK-C6050 YK-C6050-5	YK-C6075 YK-C6075-5	YK-C60100 YK-C60100-5	YK-C60125 YK-C60125-5
Number of phases	Two phases/Five phases	Two phases/Five phases	Two phases/Five phases	Two phases/Five phases
Table surface size	60*60mm			
Movement stroke	±5.5 °			
Body weight	0.5kg			
Lead screw parameters	Diameter 6mm, pitch 1mm			
Material	Aluminum alloy			
Repetitive positioning accuracy	Two phases (Grade U±0.005°/Grade P±0.01°) • five phases (±0.003°)			
Drive current	0.7A			
Maximum speed	15 °/s	10 °/s	8 °/s	6 °/s
Load	49N(5kgf)			
Motor	28mm step			

Horizontal lifting type	P41
Model	YK-ZF6010
Number of phases	Two phases
Table surface size	60*88mm
Movement stroke	10mm
Body weight	0.86kg
Lead screw parameters	Diameter 8mm, pitch 1mm
Material	Aluminum alloy
Repetitive positioning accuracy	Grade U±1μm
Drive current	0.7A
Maximum speed	8mm/s
Load	5kg
Motor	28mm step

Quick Indexing of XXY Alignment Platform Product Catalog

				P49-P53	XXY alignment platform
Model	YK-XXY150	YK-XXY160	YK-XXY180	YK-XXY250	YK-XXY350
Dimension of upper table surface	150mm	160mm	180mm	250mm	350mm
Repetitive positioning accuracy	Grade U±1μm/Grade P±3μm			Grade P±3μm	
Stroke	±5mm	±5mm	±5mm	±10mm	±12mm
Rotation angle	±3.	±3.	±3 °	±5 °	
Screw diameter	φ6mm	φ6mm	φ6mm	φ12mm	
Screw lead	1mm	1mm	1mm	5mm	
Planeness	±0.02m	±0.02mm	±0.02mm	±0.025mm	±0.03mm
Horizontal load capacity	30kgf			50kgf	80kgf
Body material	Aluminum alloy				
Body weight	5.3±2%kg		5.3±2%kg	14.2±2%kg	22±2%kg

	P53	XXY alignment platform
Model	YK-XXY450	
Dimension of upper table surface	450mm	
Repetitive positioning accuracy	Grade P±3μm	
Stroke	±12mm	
Rotation angle	±3 °	
Screw diameter	φ12 mm	
Screw lead	5mm	
Planeness	±0.035mm	
Horizontal load capacity	80kgf	
Body material	Aluminum alloy	
Body weight	26±2%kg	

Grating Closed Loop
Precision Electric Fine-tuning Stage

60 Series 80 Series

Grating Fine-tuning Stage (60 Series)

Model description

YK - L 60 20 G - S G N - 5 - 61 5

Brand logo	Type		Table surface size	Stroke	Accuracy class		Material		Accuracy class		Outgoing line direction		Motor type		Lead screw specification		Lead screw grade	
YARAK	L	Linear type	60*60mm	20mm	G	Ultra-high precision	S	Stainless steel	G	Grating closed loop	N	Standard outgoing line	5	5-phase motor	61	0601	5	C5

YK - HL 60 20 G - S G N - 5 - 81 5

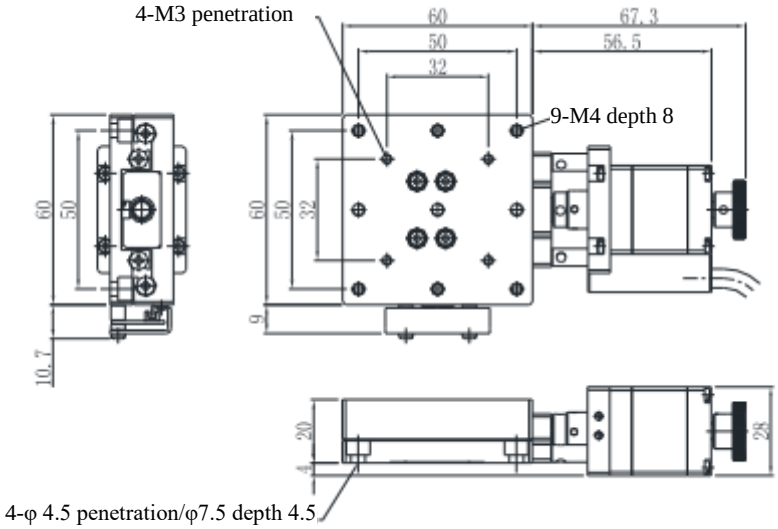
Brand logo	Type		Table surface size	Stroke	Accuracy class		Material		Accuracy class		Outgoing line direction		Motor type		Lead screw specification		Lead screw grade	
YARAK	HL	Enhanced type	60*60mm	20mm	G	Ultra-high precision	S	Stainless steel	G	Grating closed loop	N	Standard outgoing line	5	5-phase motor	81	0801	5	C5
			60*60mm	30mm														
			60*60mm	50mm														

Model		YK-L6020G-SGN-5-815	YK-HL6020G-SGN-5-815	YK-HL6030G-SGN-5-815	YK-HL6050G-SGN-5-815
Machinery specification	Table surface size	60*60mm		60*70mm	60*80mm
	Movement stroke	±10mm		±15mm	±25mm
	Body weight	0.7Kg	0.75Kg	0.85Kg	0.95Kg
	Lead screw type	Ball screw guide rail			
	Lead screw parameters	Diameter 6mm, pitch 1mm	Diameter 8mm, pitch 1mm		
	Sliding rail	Linear ball guide rail			
	Accuracy class	Ultra-high precision			
	Outgoing method	Standard outgoing line			
	Material	S=SUS-440C			
Precision specification	Resolution	0.1μm			
	Repetitive positioning accuracy	Grade G±0.3μm			
	Positioning accuracy	4μm			5μm
	Reverse gap	0.5μm			
	Straightness	5μm			
	Parallelism	20μm			
	Movement parallelism	10μm			
	Drive current	1.2A			
	Maximum speed	10mm/s			
	Load	98N(10kgf)			
	Motor	PKP523N12B (Oriental Motor)			
Electric appliance specification	Limit sensor	NPN normally closed			
	Origin sensor	NPN normally closed			
	Supporting driver	Please contact our engineer			

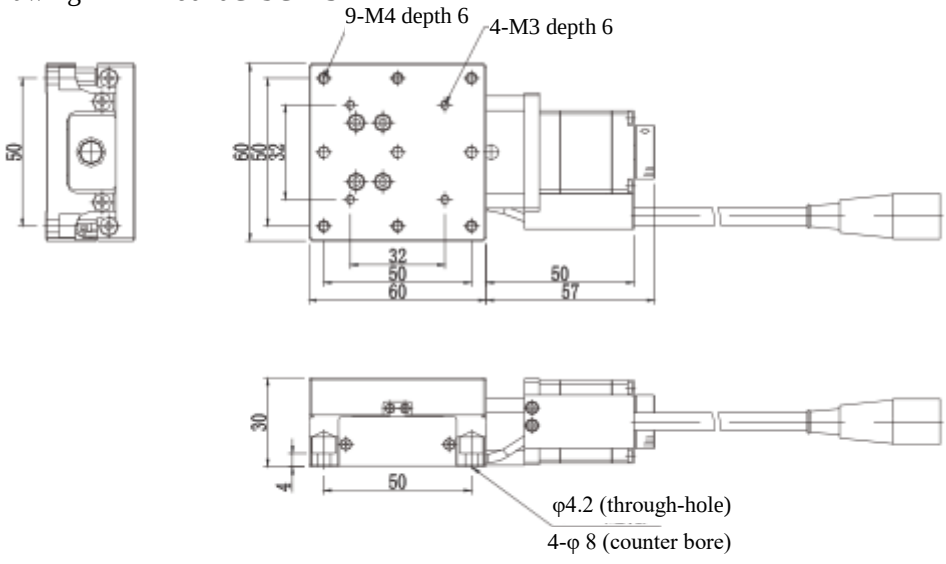
Grating Fine-Tuning Stage (60 Series)

Real product photo

Three-view Drawing YK-L6020G-SGN-5

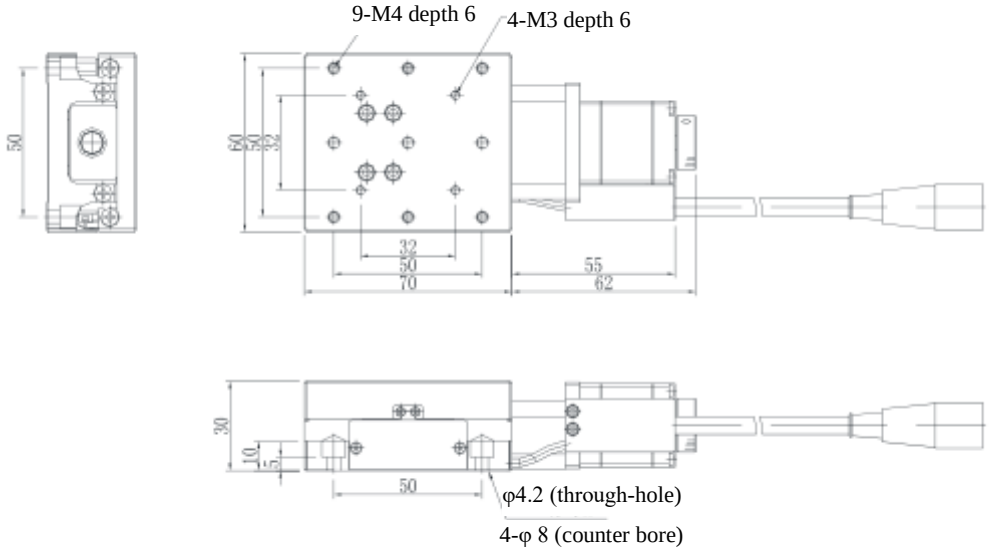


Three-view Drawing YK-HL6020G-SGN-5

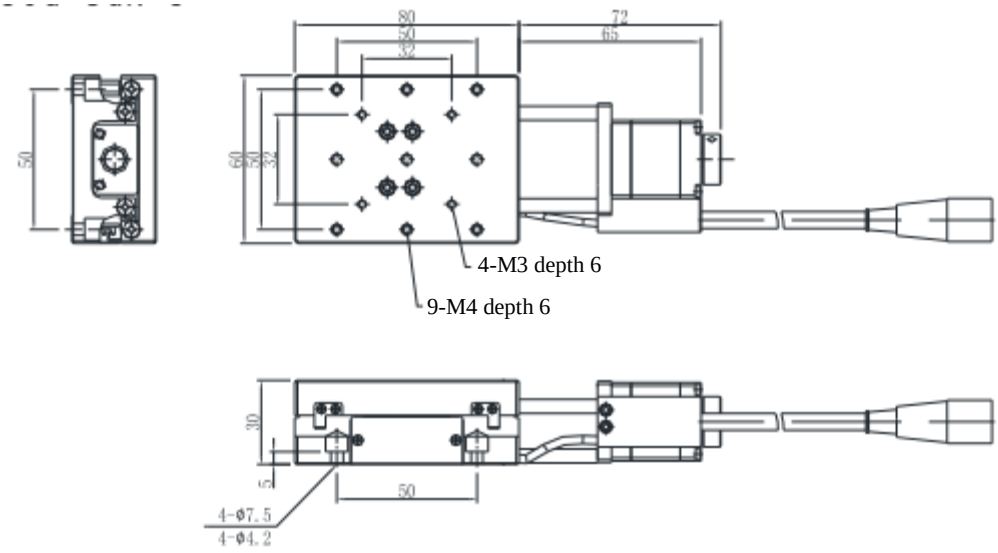


Grating Fine-Tuning Stage (60 Series)

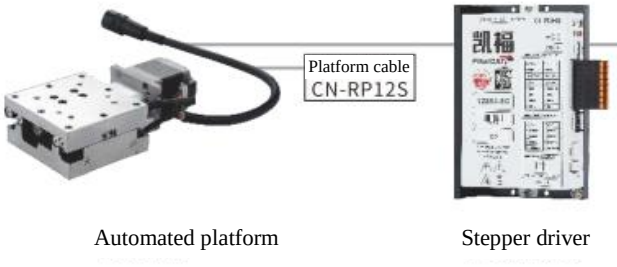
Three-view Drawing YK-HL6030G-SGN-5



Three-view Drawing YK-HL6050G-SGN-5



System composition



Automated platform

Stepper driver

● The grating reading head comes with a cable of about 1.9 meters, and the platform cable shall be of the same length as the grating cable;
● Assuming the platform cable is 3 meters long, a 1-meter-long grating cable extended line is required;
● Assuming the platform cable is 2 meters long, a 0.2-meter-long grating cable extended line is required.

Grating Fine-tuning Stage (80 Series)

Model description

YK - HL 80 20 G - S G N - 5 - 81 5

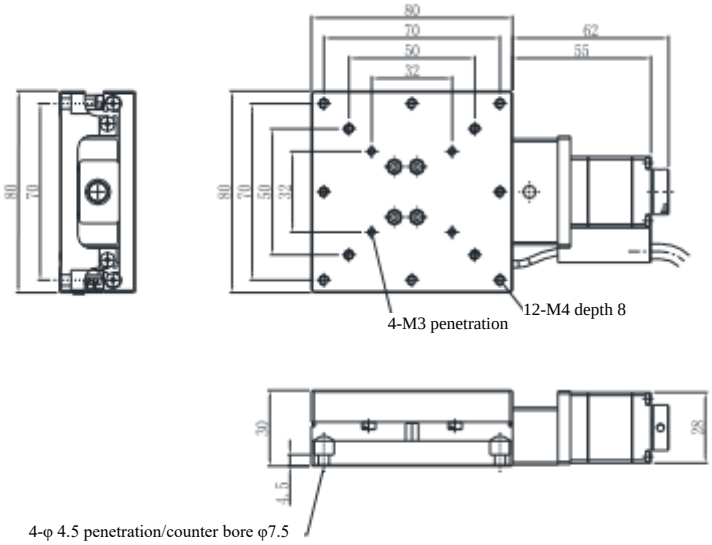
Brand logo	Type		Table surface size	Stroke	Accuracy class		Material		Accuracy class		Outgoing line direction		Motor type		Lead screw specification		Lead screw grade	
YARAK	HL	Enhanced type	80*80mm	20mm	G	Ultra-high precision	S	Stainless steel	G	Grating closed loop	N	Standard outgoing line	5	5-phase motor	81	0801	5	C5
				30mm														
				50mm														

Model		YK-HL8020G-SGN-5-815	YK-HL8030G-SGN-5-815	YK-HL8050G-SGN-5-815
Machinery specification	Table surface size	80*80mm		
	Movement stroke	±10mm	±15mm	±25mm
	Body weight	1.2Kg		
	Lead screw type	Ball screw		
	Lead screw parameters	Diameter 8mm, pitch 1mm		
	Sliding rail	Linear ball guide rail		
	Accuracy class	Ultra-high precision		
	Outgoing method	Standard outgoing line		
	Material	S=SUS-440C		
Precision specification	Resolution	0.1μm		
	Repetitive positioning accuracy	Grade G±0.3μm		
	Positioning accuracy	4μm		5μm
	Reverse gap	0.5μm		
	Straightness	5μm		
	Parallelism	20μm		
	Drive current	1.2A		
	Maximum speed	10mm/s		
	Load	98N(10kgf)		
	Motor	PKP523N12B (Oriental Motor)		
Electric appliance specification	Limit sensor	NPN normally closed		
	Origin sensor	NPN normally closed		
	Supporting driver	Please contact our engineer		

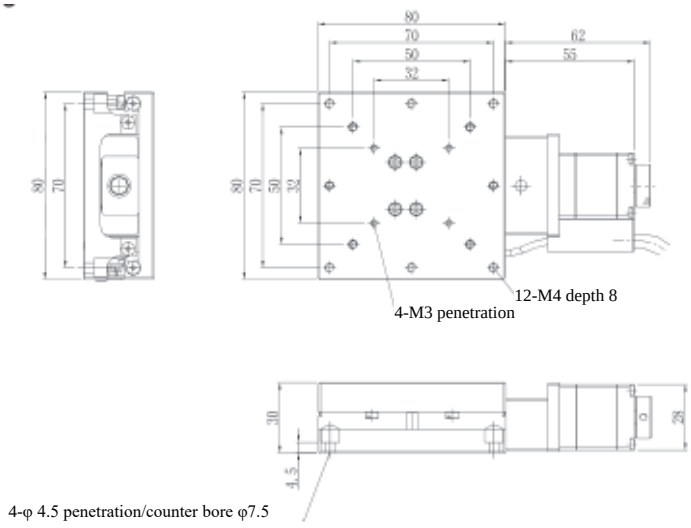
Grating Fine-tuning Stage (80 Series)

Real product photo

Three-view Drawing YK-HL8020G-SGN-5

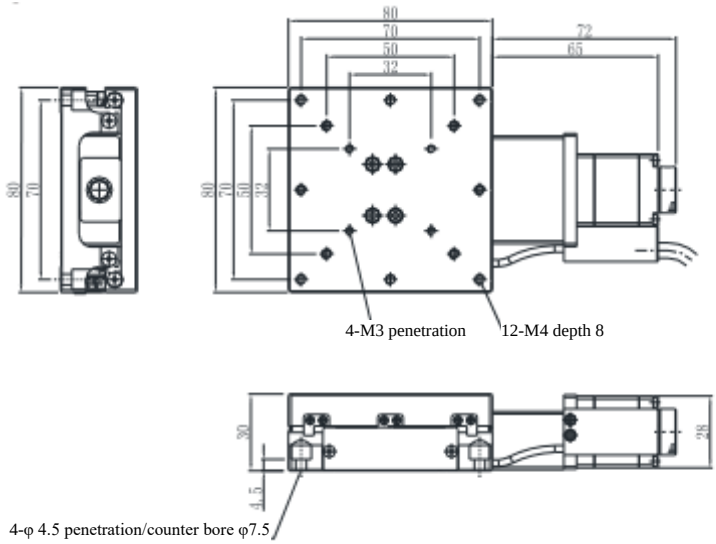


Three-view Drawing YK-HL8030G-SGN-5

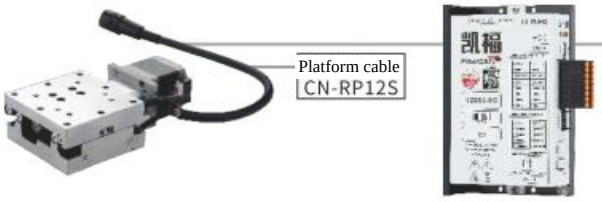


Grating Fine-tuning Stage (80 Series)

Three-view Drawing YK-HL8050G-SGN-5



System composition

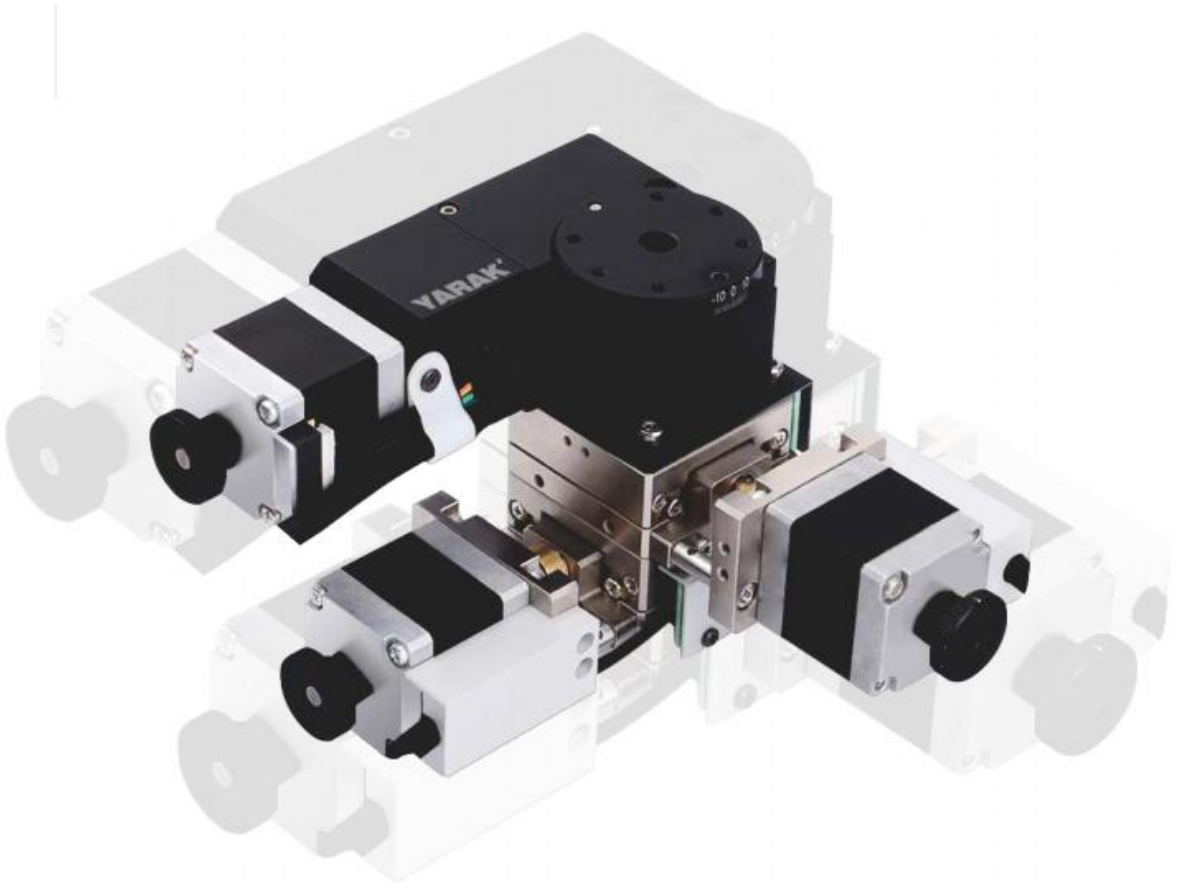


Automated platform

Stepper driver

- The grating reading head comes with a cable of about 1.9 meters, and the platform cable shall be of the same length as the grating cable;
- Assuming the platform cable is 3 meters long, a 1-meter-long grating cable extended line is required;
- Assuming the platform cable is 2 meters long, a 0.2-meter-long grating cable extended line is required.

Precision Electric fine-tuning Stage



			XY type	XYZ type
	Linear type	Rotating type	Arc pendulum type	Lifting type

Small size and compact structure

Small size and compact structure (the workbench can be small as 40*40, even smaller).

Flexible matching mode

Flexible matching mode (can flexibly configure 3-axis, 4-axis, 5-axis to achieve multidimensional motion control).

Support fully closed-loop control

Support full-closed loop control (used together with the grating ruler or encoder to achieve step full-closed loop control).

High positioning accuracy

High positioning accuracy (high-grade ball screw, with a maximum repeated positioning accuracy of ±0.3μm).

YK-L4015

● Model description

Two phases

YK - L 40 15 U - S S L - 2 - 61 5

Brand logo	Type		Table surface size	Stroke	Accuracy class		Material		Design type		Outgoing line direction		Motor type		Lead screw specification		Lead screw grade	
YARAK	L	Linear type	40*40mm	15mm	U	High accuracy	S	Stainless steel	S	Standard type	L	Left outgoing line	2	2-phase open-loop stepping	61	0601	5	C5
					P	Standard accuracy			E	DB9 needle type	R	Right outgoing line	2C	2-phase closed-loop stepping			7	C7
					E	General accuracy							2L	2-phase high-torque stepping				
													2M	2-phase brake stepping				

Five phases

YK - L 40 15 - S S L - 5

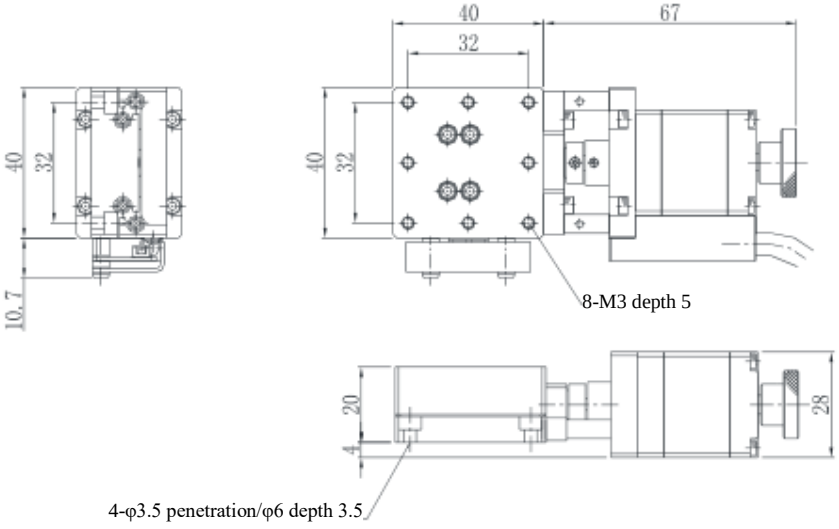
Brand logo	Type		Table surface size	Stroke	Material		Design type		Outgoing line direction		Motor type	
YARAK	L	Linear type	40*40mm	15mm	S	Stainless steel	S	Standard type	L	Left outgoing line	5	5-phase stepper motor
							E	DB9 needle type	R	Right outgoing line		

Model		YK-L4015 series		
Machinery specification	Table surface size	40*40mm		
	Movement stroke	±7.5mm		
	Body weight	0.4Kg		
	Lead screw type	Ball screw		
	Lead screw parameters	Diameter 6mm, pitch 1mm		
	Sliding rail	Linear ball guide rail		
	Number of phases	Two phases		Five phases
	Lead screw grade	C5	C7	C5
	Outgoing method	Left outgoing line/right outgoing line		
	Material	S=SUS-440C		
Precision specification	Resolution (Full/Half)	2-phase stepping 5μm/2.5μm		5-phase stepping 2μm/1μm
	Repetitive positioning accuracy	U ±1m	Grade P±3μm	±0.5μm
	Positioning accuracy	10μm	20μm	
	Reverse gap	2.5μm		
	Straightness	15μm		
	Parallelism	20μm		
	Drive current	0.7A		
	Maximum speed	10mm/s		
	Load	98N(10kgf)		
	Motor open loop	(Two-phase STP-28D1012-01) ·(Five-phase MC528K12-01B)		
Electric appliance specification	Positive and negative limit sensor	NPN normally closed		
	Origin sensor	NPN normally closed		
	Sensor voltage	24V		
Optional	Motor closed loop	Y07-28D1-3401D-E1000		

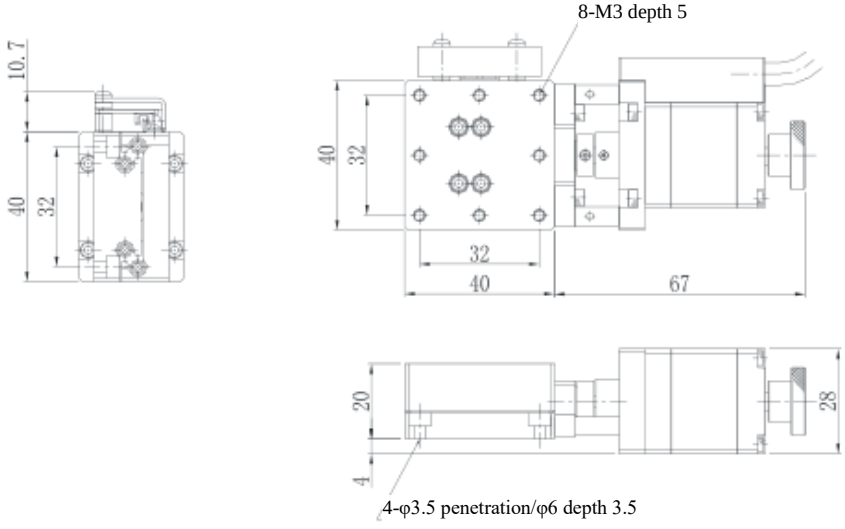
YK-L4015

Real product photo

Three-view Drawing YK-L4015-SSL-2



Three-view Drawing YL-L4015-SSR-2



YK-L6015

● Model description

Two phases

YK - L 60 15 U - S S L - 2 - 61 5

Brand logo	Type		Table surface size	Stroke	Accuracy class		Material		Design type		Outgoing line direction		Motor type		Lead screw specification		Lead screw grade	
YARAK	L	Linear type	60*60mm	15mm	U	High accuracy	S	Stainless steel	S	Standard type	L	Left outgoing line	2	2-phase open-loop stepping	61	0601	5	C5
			60*60mm	20mm	P	Standard accuracy			E	DB9 needle type	R	Right outgoing line	2C	2-phase closed-loop stepping			7	C7
				30mm	E	General accuracy							2L	2-phase high-torque stepping				
													2M	2-phase brake stepping				

Five phases

YK - L 60 15 - S S L - 5

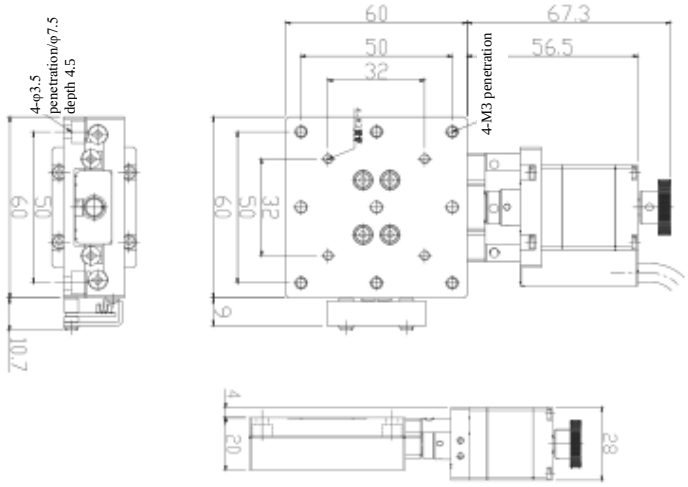
Brand logo	Type		Table surface size	Stroke	Material		Design type		Outgoing line direction		Motor type	
YARAK	L	Linear type	60*60mm	15mm	S	Stainless steel	S	Standard type	L	Left outgoing line	5	5-phase stepper motor
			60*70mm	20 mm			E	DB9 needle type	R	Right outgoing line		
				30 mm								

Model		YK-L6015 series			YK-L6020 series			YK-L6030 series		
Machinery specification	Table surface size	60*60mm			60*60mm			60*70mm		
	Movement stroke	±7.5mm			±10mm			±15mm		
	Body weight	0.4Kg			0.6Kg					
	Lead screw type	Ball screw								
	Lead screw parameters	Diameter 6mm, pitch 1mm								
	Sliding rail	Linear ball guide rail								
	Number of phases	Two phases		Five phases	Two phases		Five phases	Two phases		Five phases
	Lead screw grade	C5	C7	C5	C5	C7	C5	C5	C7	C5
	Outgoing method	Left outgoing line/right outgoing line								
	Material	S=SUS-440C								
Precision specification	Resolution (Full/Half)	(2-phase stepping 5μm/2.5μm) · (5-phase stepping 2μm/1μm)								
	Repetitive positioning accuracy	Grade U±1μm	Grade P±3μm	±0.5μm	Grade U±1μm	Grade P±3μm	±0.5μm	Grade U±1μm	Grade P±3μm	±0.5μm
	Positioning accuracy	10μm	20μm		10μm	20μm		10μm	20μm	
	Reverse gap	2.5μm								
	Straightness	15μm								
	Parallelism	20μm								
	Drive current	0.7A								
	Maximum speed	10mm/s								
	Load	98N(10kgf)								
	Motor open loop	(Two-phase STP-28D1012-01) ·(Five-phase MC528K12-01B)								
Electric appliance specification	Positive and negative limit sensor	NPN normally closed								
	Origin sensor	NPN normally closed								
	Sensor voltage	24V								
Optional	Motor closed loop	Y07-28D1-3401D-E1000								

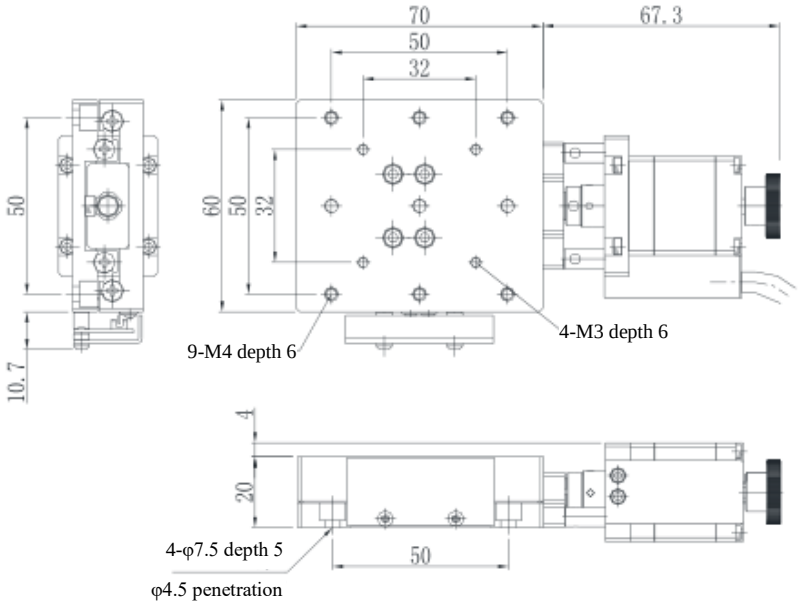
YK-L6015

Real product photo

Three-view Drawing YK-L6015/YK-L6020



Three-view Drawing YK-L6030



YK-HL6020

● Model description

Two phases

YK - HL 60 20 U - S S N - 2 - 81 5

Brand logo	Type		Table surface size	Accuracy class		Material		Design type		Outgoing line direction		Motor type		Lead screw specification		Lead screw grade	
YARAK	HL	Enhanced linear type	60*60mm	U	High accuracy	S	Stainless steel	S	Standard type	N	Standard outgoing line	2	2-phase open-loop stepping	81	0801	5	C5
			60*70mm	P	Standard accuracy			E	DB9 needle type			2C	2-phase closed-loop stepping			7	C7
			60*80mm									2L	2-phase high-torque stepping				
												2M	2-phase brake stepping				
												S1	50/100W servo				

Five phases

YK - HL 60 20 - S S N - 5

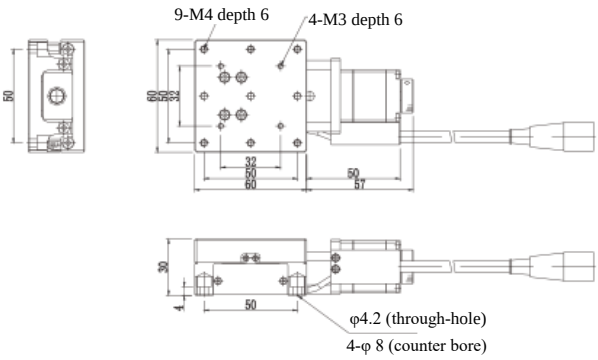
Brand logo	Type		Table surface size	Stroke	Material		Design type		Outgoing line direction		Motor type	
YARAK	HL	Enhanced linear type	60*60mm	20mm	S	Stainless steel	S	Standard type	N	Standard outgoing line	5	5-phase stepper motor
			60*70mm	30mm			E	DB9 needle type				
			60*80mm	50 mm								

Model		YK-HL6020 series			YK-HL6030 series			YK-HL6050 series		
Machinery specification	Table surface size	60*60mm			60*70mm			60*80mm		
	Movement stroke	±10mm			±15mm			±25mm		
	Body weight	0.75Kg			0.85Kg					
	Lead screw type	Ball screw								
	Lead screw parameters	Diameter 8mm, pitch 1mm								
	Sliding rail	Linear ball guide rail								
	Number of phases	Two phases		Five phases	Two phases		Five phases	Two phases		Five phases
	Lead screw grade	C5	C7	C5	C5	C7	C5	C5	C7	C5
	Outgoing method	Fixed outgoing line								
	Material	S=SUS-440C								
Precision specification	Resolution (Full/Half)	(2-phase stepping 5μm/2.5μm) · (5-phase stepping 2μm/1μm)								
	Repetitive positioning accuracy	Grade U±1μm	Grade P±3μm	±0.5μm	Grade U±1μm	Grade P±3μm	±0.5μm	Grade U±1μm	Grade P±3μm	±0.5μm
	Positioning accuracy	10μm	20μm		10μm	20μm		10μm	20μm	
	Reverse gap	2.5μm								
	Straightness	10μm								
	Parallelism	15μm								
	Drive current	0.7A								
	Maximum speed	10mm/s								
	Load	147N(15kgf)								
	Motor open loop	(Two-phase STP-28D1012-01) ·(Five-phase MC528K12-01B)								
Electric appliance specification	Positive and negative limit sensor	NPN normally closed								
	Origin sensor	NPN normally closed								
	Sensor voltage	24V								
Optional	Motor closed loop	Y07-28D1-3401D-E1000								

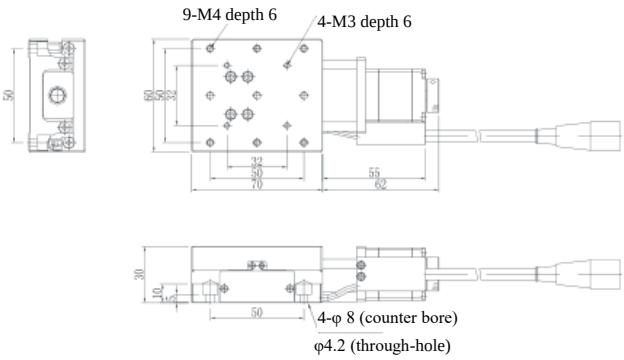
YK-HL6020

Real product photo

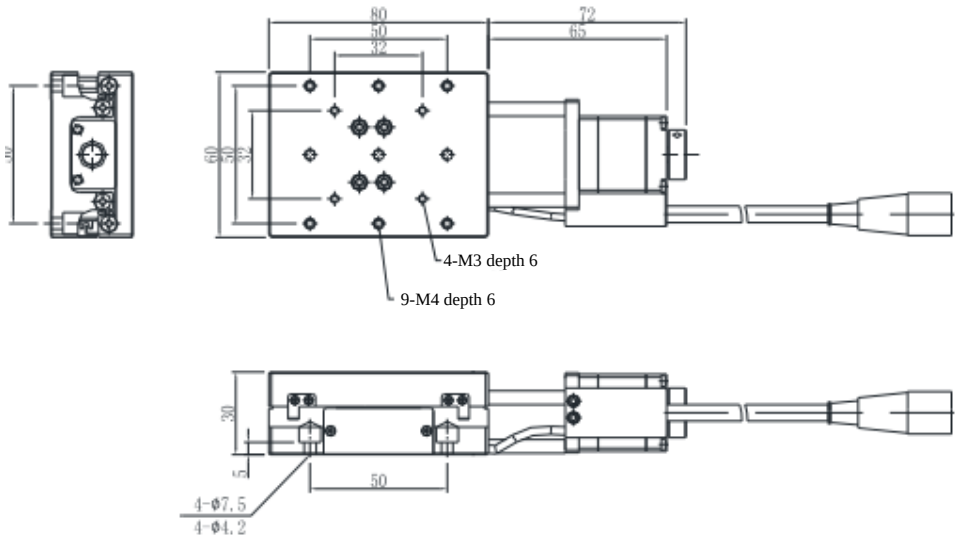
Three-view Drawing YK-HL6020



Three-view Drawing YK-HL6030



Three-view Drawing YK-HL6050



YK-HL8020

● Model description

Two phases

YK - HL 80 20 U - S S N - 2 - 81 5

Brand logo	Type		Table surface size	Stroke	Accuracy class		Material		Design type		Outgoing line direction		Motor type		Lead screw specification		Lead screw grade	
YARAK	HL	Enhanced linear type	80*80mm	20mm	U	High accuracy	S	Stainless steel	S	Standard type	N	Standard outgoing line	2	2-phase open-loop stepping	81	0801	5	C5
				30mm	P	Standard accuracy			E	DB9 needle type			2C	2-phase closed-loop stepping			7	C7
				50mm									2L	2-phase high-torque stepping				
													2M	2-phase brake stepping				
													S1	50/100W servo				
													S2	200/400W servo				

Five phases

YK - HL 80 20 - S S N - 5

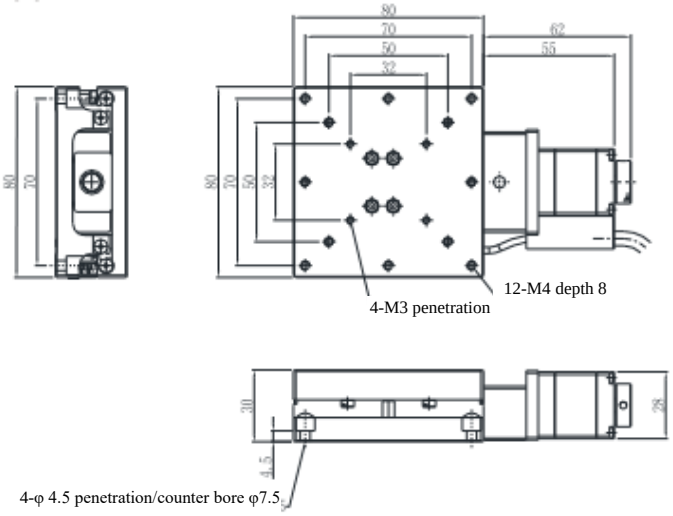
Brand logo	Type		Table surface size	Stroke	Material		Design type		Outgoing line direction		Motor type	
YARAK	HL	Enhanced linear type	80*80mm	20mm	S	Stainless steel	S	Standard type	N	Standard outgoing line	5	5-phase stepper motor
				30mm			E	DB9 needle type				
				50 mm								

Model		YK-HL8020 series			YK-HL8030 series			YK-HL8050 series		
Machinery specification	Table surface size	80*80mm								
	Movement stroke	±10mm			±15mm			±25mm		
	Body weight	1.1Kg								
	Lead screw type	Ball screw								
	Lead screw parameters	Diameter 8mm, pitch 1mm								
	Sliding rail	Linear ball guide rail								
	Number of phases	Two phases		Five phases	Two phases		Five phases	Two phases		Five phases
	Lead screw grade	C5	C7	C5	C5	C7	C5	C5	C7	C5
	Outgoing method	Fixed outgoing line								
	Material	S=SUS-440C								
Precision specification	Resolution (Full/Half)	(2-phase stepping 5μm/2.5μm) · (5-phase stepping 2μm/1μm)								
	Repetitive positioning accuracy	Grade U±1μm	Grade P±3μm	±0.5μm	Grade U±1μm	Grade P±3μm	±0.5μm	Grade U±1μm	Grade P±3μm	±0.5μm
	Positioning accuracy	10μm	20μm		10μm	20μm		10μm	20μm	
	Reverse gap	2.5μm								
	Straightness	10μm								
	Parallelism	30μm								
	Drive current	0.7A								
	Maximum speed	10mm/s								
	Load	147N(15kgf)								
	Motor open loop	(Two-phase STP-28D1012-01) ·(Five-phase MC528K12-01B)								
Electric appliance specification	Positive and negative limit sensor	NPN normally closed								
	Origin sensor	NPN normally closed								
	Sensor voltage	24V								
Optional	Motor closed loop	Y07-28D1-3401D-E1000								

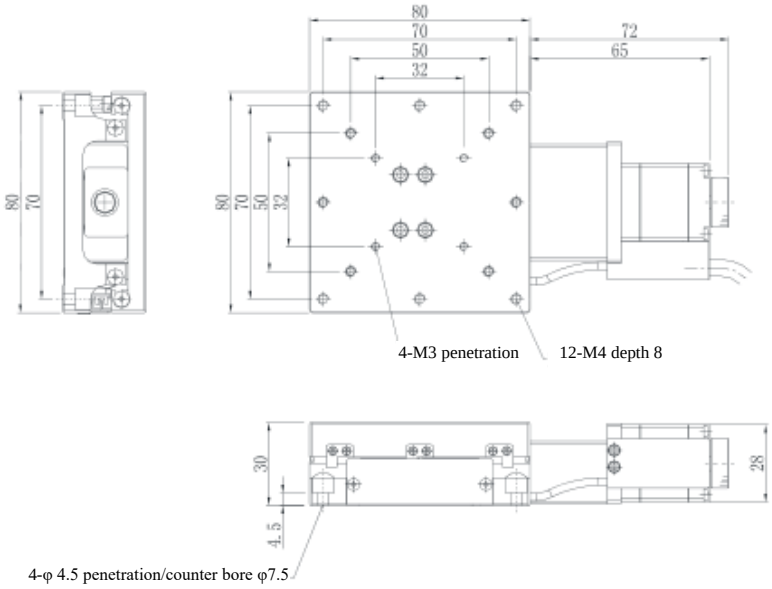
YK-HL8020

Real product photo

Three-view Drawing YK-HL8020/YK-HL8030



Three-view Drawing YK-HL8050



YK-R4017

● Model description

Two phases

YK - R 40 17 U - A S N - 2 - 61 5

Brand logo	Type		Table surface size	Angle	Accuracy class		Material		Design type		Outgoing line direction		Motor type		Lead screw specification		Lead screw grade	
YARAK	R	Rotating type	Φ40mm	17°	U	High accuracy	A	Aluminum alloy	S	Standard type	N	Standard outgoing line	2	2-phase open-loop stepping	61	0601	5	C5
			Φ60mm	15°	P	Standard accuracy			E	DB9 needle type			2C	2-phase closed-loop stepping			7	C7
			φ80mm	16°									2L	2-phase high-torque stepping				
			Φ100mm										2M	2-phase brake stepping				
			Φ120mm															

Five phases

YK - R 40 17 - A S N - 5

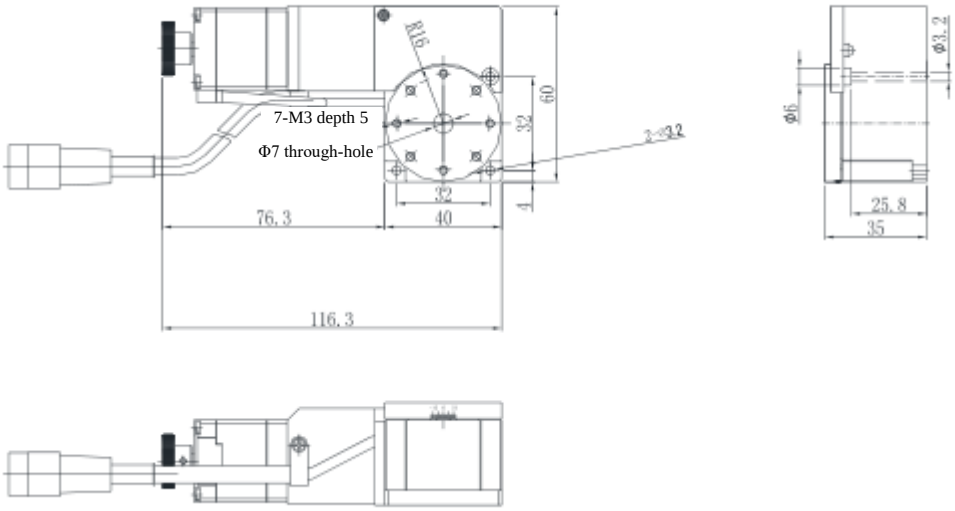
Brand logo	Type		Table surface size	Angle	Material		Design type		Outgoing line direction		Motor type	
YARAK	R	Rotating type	Φ40mm	17°	A	Aluminum alloy	S	Standard type	N	Standard outgoing line	5	5-phase stepper motor
			Φ60mm	15°			E	DB9 needle type				
			φ80mm	16°								
			Φ100mm Φ120mm									

Model		YK-R4017 series			YK-R6015 series			YK-R8016 series			YK-R12016 series		
Machinery specification	Table surface size	φ40mm			φ60mm			φ80mm			φ120mm		
	Movement stroke	±8.5 °			±7.5 °			±8.0 °					
	Body weight	0.4Kg			0.6 Kg			0.8 Kg			1.8 Kg		
	Lead screw type	Ball screw											
	Lead screw parameters	Diameter 6mm, pitch 1mm											
	Sliding rail	Linear ball guide rail											
	Number of phases	Two phases		Five phases	Two phases		Five phases	Two phases		Five phases	Two phases		Five phases
	Lead screw grade	C5	C7	C5	C5	C7	C5	C5	C7	C5	C5	C7	C5
	Outgoing method	Fixed outgoing line											
	Material	A=Aluminum alloy											
Precision specification	Resolution (Full/Half)	0.01685 ?0.008425 °			0.0106 ?0.0053 °			0.00775 ?0.003875 °			0.0052 ?0.0026 °		
	Repetitive positioning accuracy	(Two-phase Grade U ±0.005 ?Grade P ±0.01 ?) ·(Five-phase ±0.003 ?)											
	Reverse gap	0.005 °											
	Concentricity	0.03 °											
	Face runout	0.05 °											
	Drive current	0.7A											
	Maximum speed	30 ?s											
	Load	39.2N(4kgf)											
	Motor open loop	(Two-phase STP-28D1012-01) ·(Five-phase MC528K12-01B)											
Electric appliance specification	Positive and negative limit sensor	NPN normally closed											
	Origin sensor	NPN normally open											
	Sensor voltage	24V											
Optional	Motor closed loop	Y07-28D1-3401D-E1000											

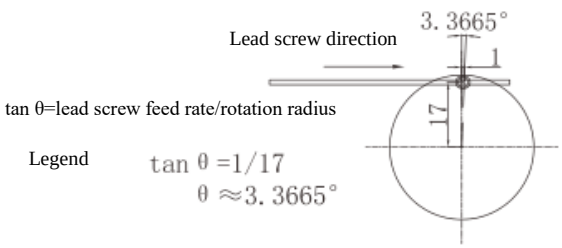
YK-R4017

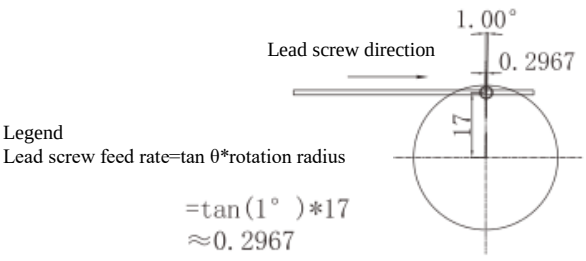
Real product photo

Three-view Drawing R4017



Algorithm diagram

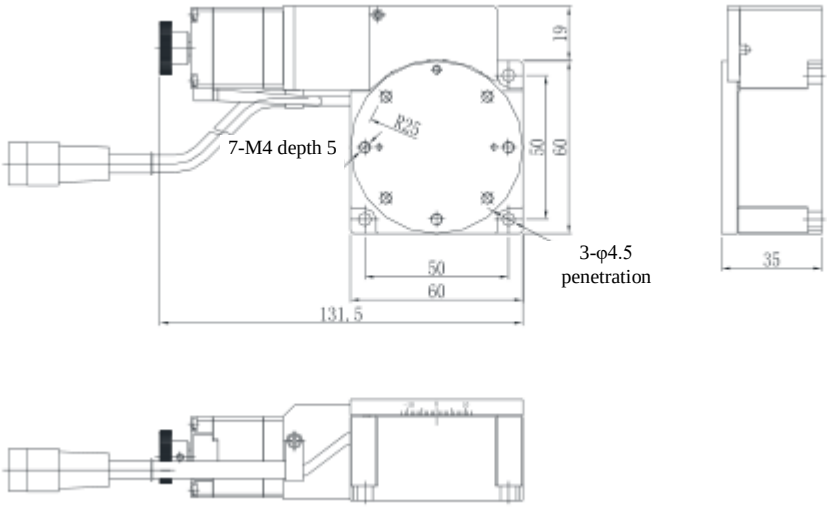




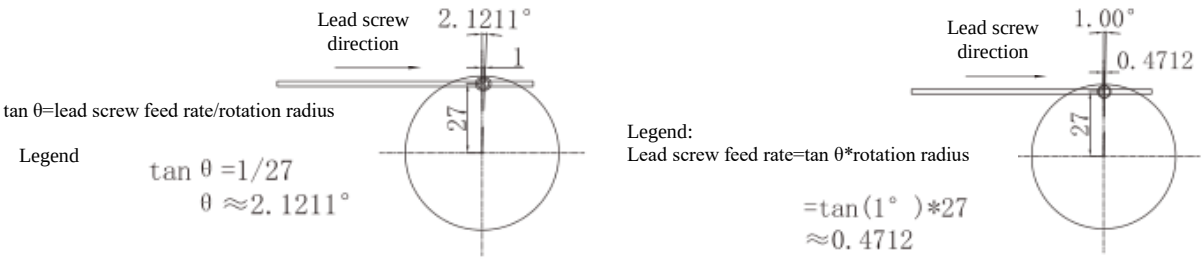
YK-R6015

Real product photo YK-R6015

Three-view Drawing YK-R6015



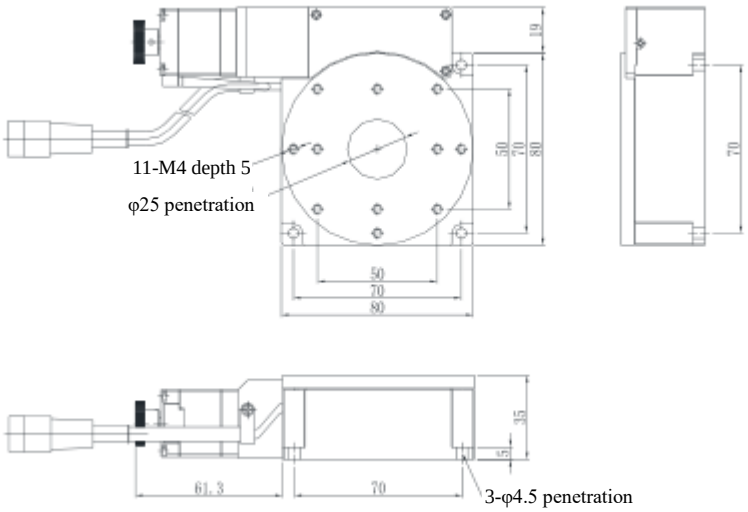
Algorithm diagram



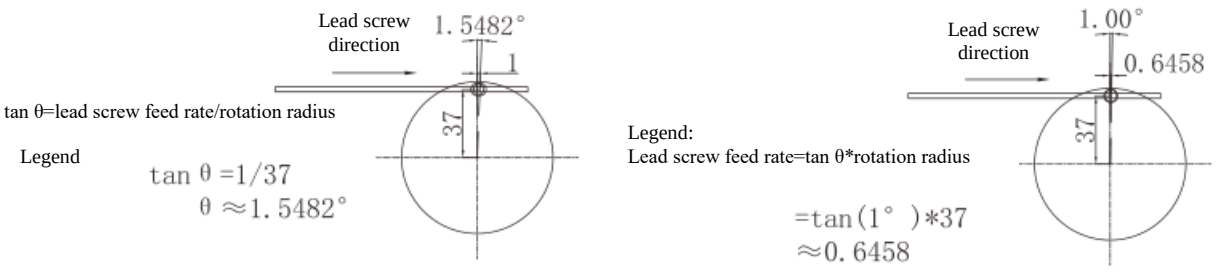
YK-R8016

Real product photo YK-R8016

Three-view Drawing YK-R8016

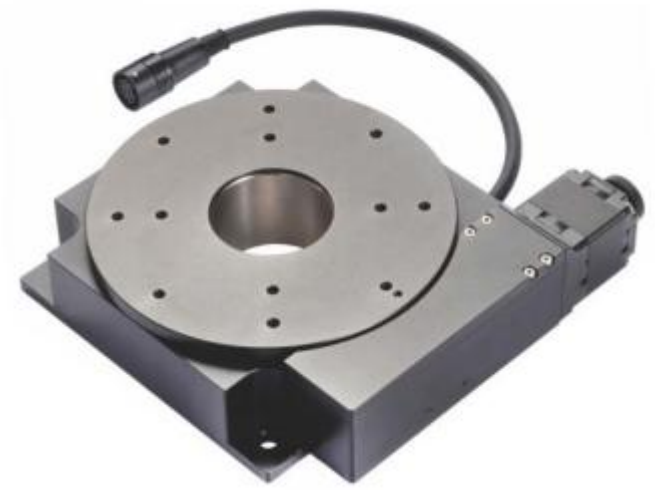


Algorithm diagram

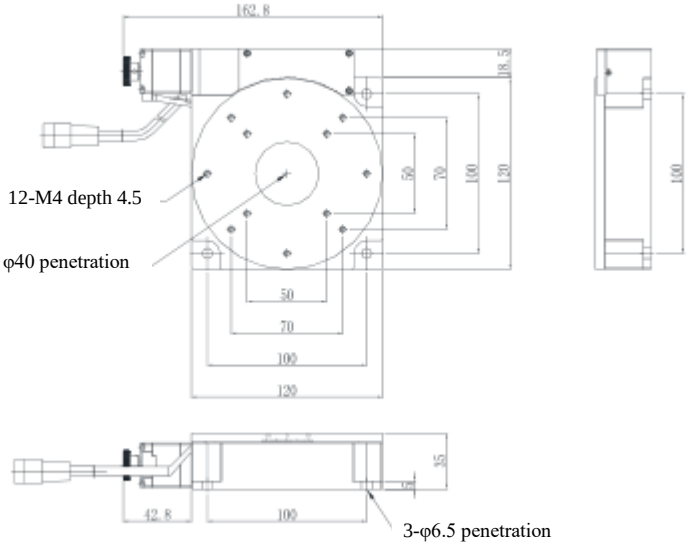


YK-R12016

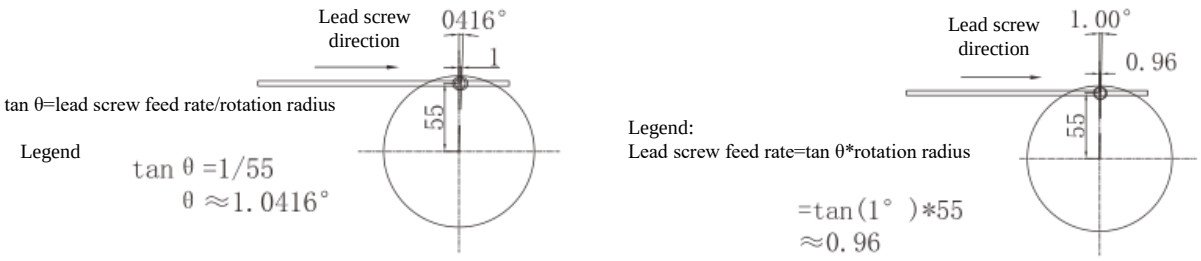
Real product photo YK-R12016



Three-view Drawing YK-R12016



Algorithm diagram



YK-C6050

● Model description

Two phases

YK - C 60 50 U - A S L - 2 - 61 5

Brand logo	Type		Table surface size	Rotation radius	Accuracy class		Material		Design type		Outgoing line direction		Motor type		Lead screw specification		Lead screw grade	
YARAK	C	Arc pendulum type	60*60mm	50mm	U	High accuracy	A	Aluminum alloy	S	Standard type	L	Left outgoing line	2	2-phase open-loop stepping	61	0601	5	C5
				75mm	P	Standard accuracy			E	DB9 needle type	R	Right outgoing line	2C	2-phase closed-loop stepping			7	C7
				100mm									2L	2-phase high-torque stepping				
				120mm									2M	2-phase brake stepping				

Five phases

YK - C 60 50 - A S L - 5

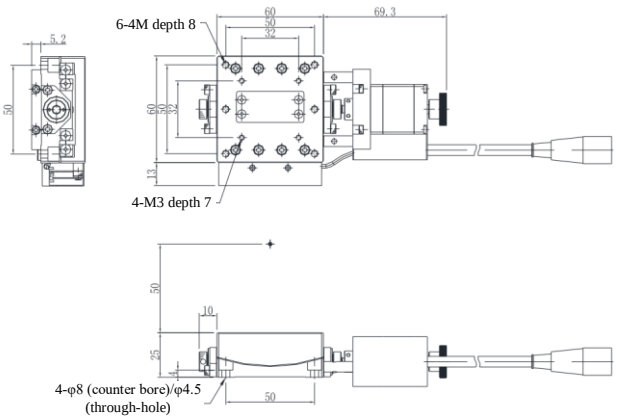
Brand logo	Type		Table surface size	Rotation radius	Material		Design type		Outgoing line direction		Motor type	
YARAK	C	Arc pendulum type	60*60mm	50mm	A	Aluminum alloy	S	Standard type	L	Left outgoing line	5	5-phase stepper motor
				75mm			E	DB9 needle type	R	Right outgoing line		
				100mm								
				125mm								

Model		YK-C6050 series		YK-C6075 series		YK-C60100 series		YK-C60125 series	
Machinery specification	Table surface size	60*60mm							
	Movement stroke	±5.5 °							
	Body weight	0.5Kg							
	Lead screw type	Ball screw							
	Lead screw parameters	Diameter 6mm, pitch 1mm							
	Sliding rail	Linear ball guide rail							
	Number of phases	Two phases	Five phases	Two phases	Five phases	Two phases	Five phases	Two phases	Five phases
	Lead screw grade	C5	C7	C5	C5	C7	C5	C5	C7	C5	C5	C7	C5
	Outgoing method	Left outgoing line/right outgoing line							
	Material	A=Aluminum alloy							
Precision specification	Resolution (Full/Half)	0.0051 ?0.00255 °		0.0035 ?0.00175 °		0.0027 ?0.00135 °		0.00218 ?0.00109 °	
	Repetitive positioning accuracy	(Two-phase Grade U ±0.005 ?Grade P ±0.01 ?) ·(Five-phase ±0.003 ?)							
	Reverse gap	0.005 °							
	Rotation center	50 ±4mm		75 ±0.4mm		100 ±0.4mm		125 ±0.4mm	
	Face runout	/							
	Drive current	0.7A							
	Maximum speed	10 ?s		7 ?s		5.5 ?s		4.5 ?s	
	Load	49N(5kgf)							
	Motor open loop	(Two-phase STP-28D1012-01) ·(Five-phase MC528K12-01B)							
Electric appliance specification	Positive and negative limit sensor	NPN normally closed							
	Origin sensor	NPN normally closed							
	Sensor voltage	24V							
Optional	Motor closed loop	Y07-28D1-3401D-E1000							

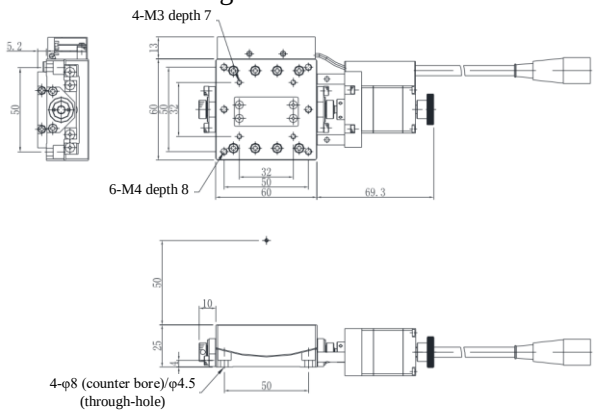
YK-C6050

Real product photo YK-C6050

Three-view Drawing YK-C6050U-ASL-2-615



Three-view Drawing YK-C6050U-ASR-2-615

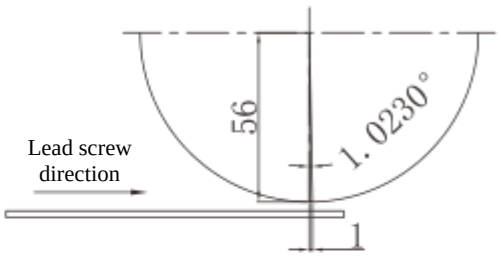


Algorithm diagram

tan θ=lead screw feed rate/rotation radius

Legend $\tan\theta = 1/56$

$\theta \approx 1.0230°$

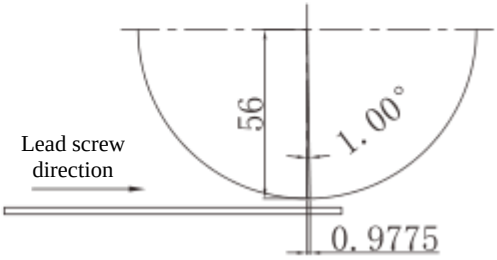


Legend:

Lead screw feed rate=tan θ*rotation radius

$=\tan(1°)*56$

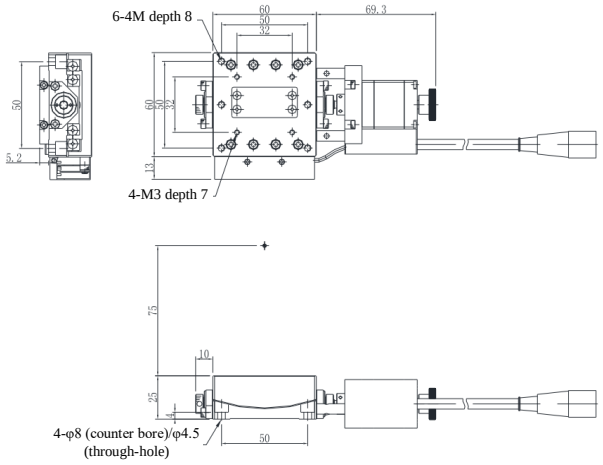
≈ 0.9775



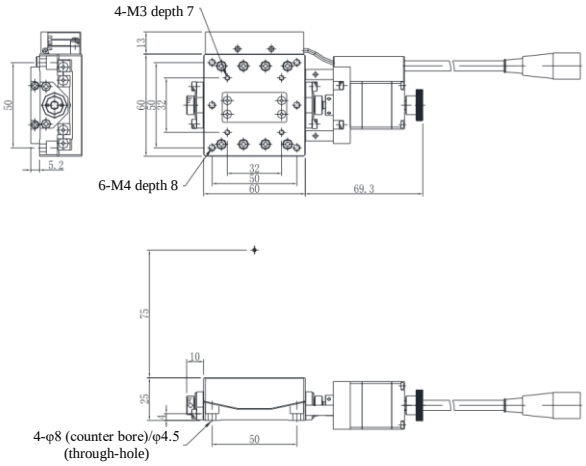
YK-C6075

Real product photo YK-C6075

Three-view Drawing YK-C6075U-ASL-2-615



Three-view Drawing YK-C6075U-ASR-2-615

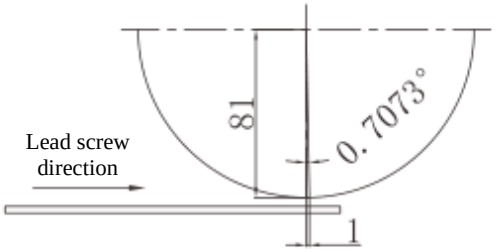


Algorithm diagram

tan θ=lead screw feed rate/rotation radius

Legend $\tan\theta = 1/81$

$\theta \approx 0.7073^\circ$

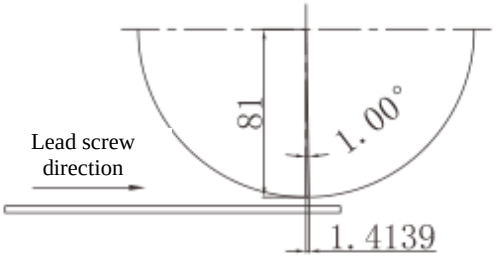


Legend:

Lead screw feed rate=tan θ*rotation radius

$= \tan(1^\circ) * 81$

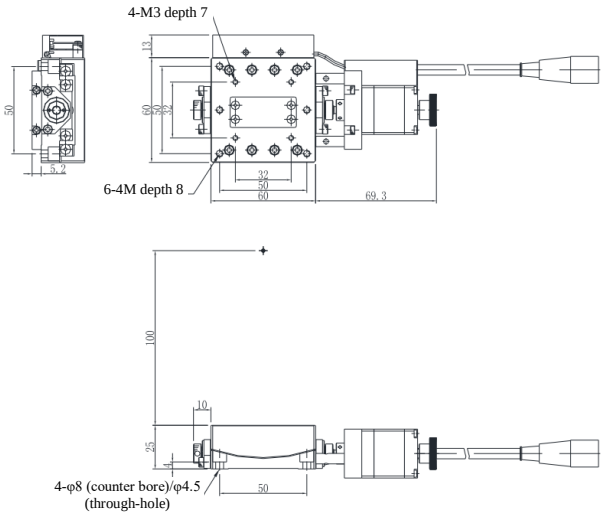
≈ 1.4139



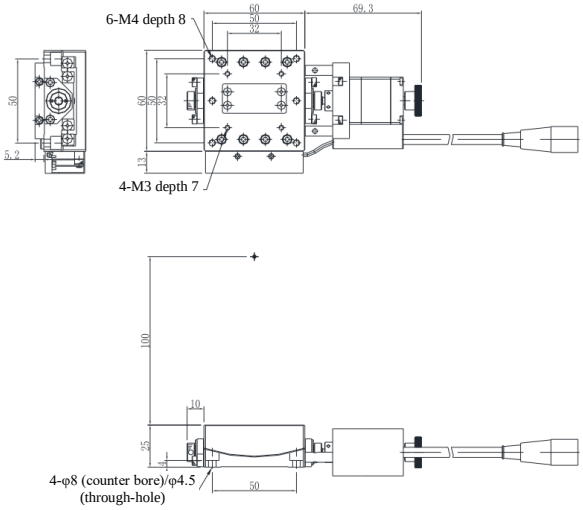
YK-C60100

Real product photo YK-C60100

Three-view Drawing YK-C60100U-ASL-2-615



Three-view Drawing YK-C60100U-ASR-2-615

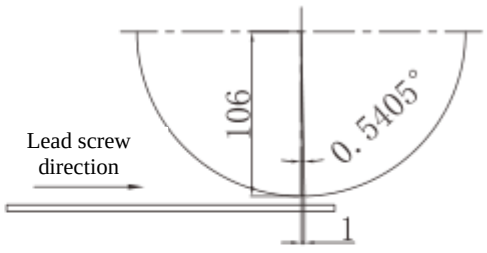


Algorithm diagram

tan θ=lead screw feed rate/rotation radius

Legend $\tan\theta = 1/106$

$\theta \approx 0.5405^\circ$

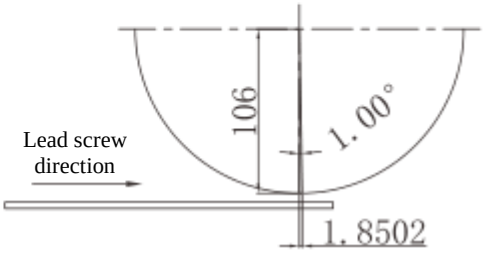


Legend:

Lead screw feed rate=tan θ*rotation radius

$= \tan(1^\circ) * 106$

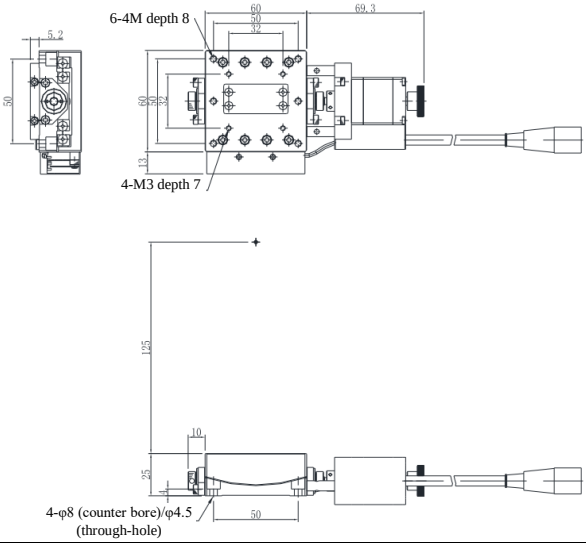
≈ 1.8502



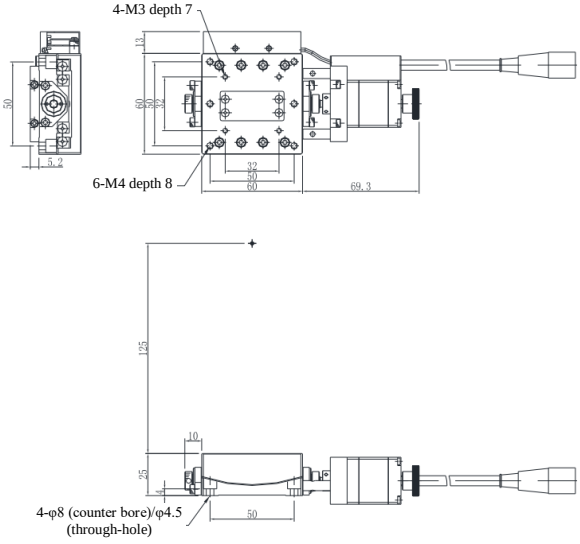
YK-C60125

Real product photo YK-C60125

Three-view Drawing YK-C60125U-ASL-2-615



Three-view Drawing YK-C60125U-ASR-2-615.

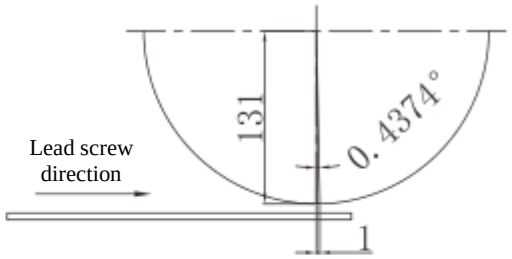


Algorithm diagram

tan θ=lead screw feed rate/rotation radius

Legend

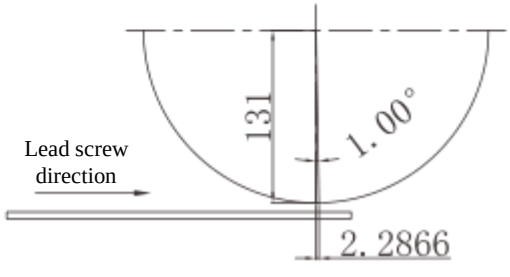
$$\tan\theta = 1/131$$
$$\theta \approx 0.4374^\circ$$



Legend:

Lead screw feed rate=tan θ*rotation radius

$$= \tan(1^\circ) * 131$$
$$\approx 2.2866$$



YK-ZF6010

● Model description

Two phases

YK - ZF 60 10 U - A S N - 2 - 81 5

Brand logo	Type		Table surface size	Stroke	Accuracy class		Material		Design type		Outgoing line direction		Motor type		Lead screw specification		Lead screw grade	
YARAK	ZF	Horizontal lifting type	60*88mm	10mm	U	High accuracy	A	Aluminum alloy	S	Standard type	N	Left outgoing line	2	2-phase open-loop stepping	81	0801	5	C5
					P	Standard accuracy			E	DB9 needle type			2C	2-phase closed-loop stepping			7	C7
													2L	2-phase high-torque stepping				
													2M	2-phase brake stepping				

Five phases

YK - ZF 60 10 - A S N - 5

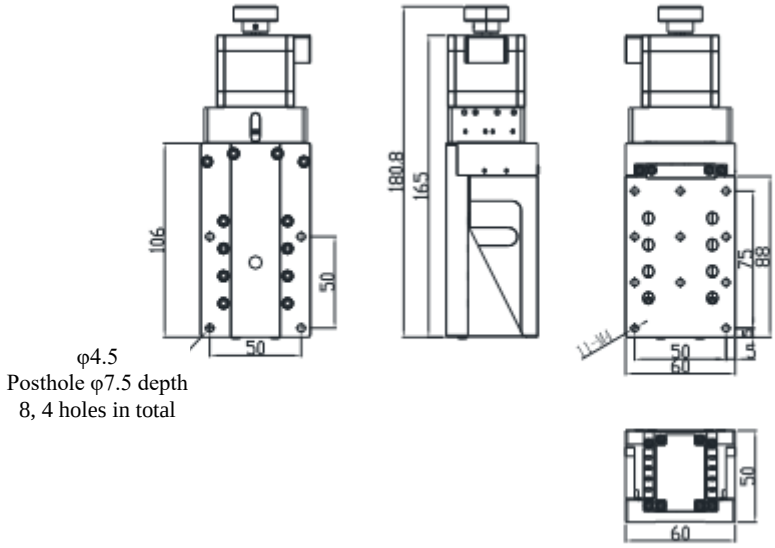
Brand logo	Type		Table surface size	Stroke	Material		Design type		Outgoing line direction		Motor type	
YARAK	ZF	Horizontal lifting type	60*88mm	10mm	A	Aluminum alloy	S	Standard type	N	Left outgoing line	5	5-phase stepper motor
							E	DB9 needle type				

Model		YK-ZF6010 series		
Machinery specification	Table surface size	60/88mm		
	Movement stroke	10mm		
	Body weight	0.86Kg		
	Lead screw type	Ball screw		
	Lead screw parameters	Diameter 8mm, pitch 1mm		
	Sliding rail	Linear ball guide rail		
	Number of phases	Two phases		Five phases
	Lead screw grade	C5	C7	C5
	Outgoing method	/		
	Material	A=Aluminum alloy		
Precision specification	Resolution (Full/Half)	1μm/0.5μm		
	Repetitive positioning accuracy	Grade U±1μm	Grade P±3μm	±0.5μm
	Positioning accuracy	10μm	20μm	±0.5μm
	Reverse gap	/		
	Straightness	20μm		
	Parallelism	10μm		
	Drive current	0.7A		
	Maximum speed	8mm/s		
	Load	5kg		
	Motor open loop	42 steps		
Electric appliance specification	Limit sensor	NPN normally closed		
	Origin sensor	Yes		
	Sensor voltage	24V		

YK-ZF6010

Real product photo

Three-view Drawing



φ4.5
Posthole φ7.5 depth
8, 4 holes in total

YK-HXY4015

Model description

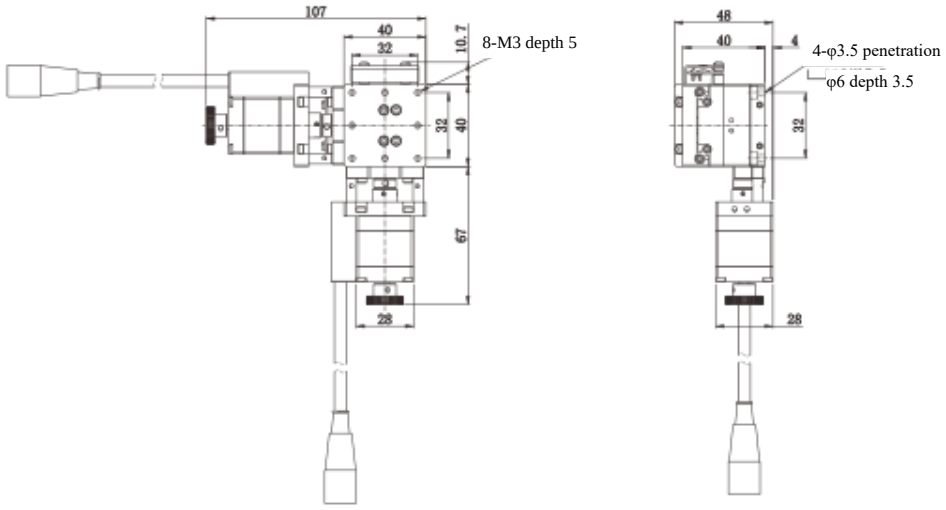
YK - H XY 4015 U - L - LL - 2

Brand logo	Type of bottom table surface	Combination method	Working face size	Accuracy class		The orientation of the motor from bottom to top, based on the X motor facing downwards:		The outgoing line direction of the motor on each single unit from bottom to top:		Motor type	
YARAK	H-enhanced type	X is in a linear direction	40*40mm	U	High accuracy	L	Face the left	L	Left outgoing line of the motor	2	2-phase open-loop stepping
	L-enhanced type	Y is in a linear direction	Stroke	P	Standard accuracy	R	Face the right	R	Right outgoing line of the motor	2C	2-phase closed-loop stepping
	None-standard type		15 mm	E	General accuracy					2L	2-phase high-torque stepping
										2M	2-phase brake stepping

Specification of each unit	
X	YK-L4015
Y	YK-L4015

Real product photo

Three-view Drawing YK-HXY4015



YK-AB6075

Model description

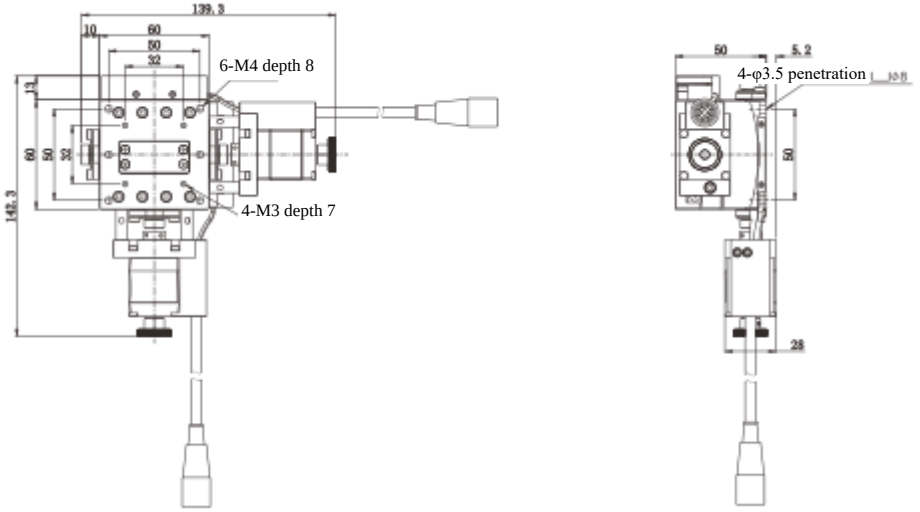
YK - AB 6075 U - R - RR - 2

Brand logo	Combination method	Working face size	Accuracy class		The orientation of the motor from bottom to top, based on the X motor facing downwards:		The outgoing line direction of the motor on each single unit from bottom to top:		Motor type	
YARAK	A-lower arc pendulum type	60*60mm	U	High accuracy	L	Face the left	L	Left outgoing line of the motor	2	2-phase open-loop stepping
	B-upper arc pendulum type	The swing radius is	P	Standard accuracy	R	Face the right	R	Right outgoing line of the motor	2C	2-phase closed-loop stepping
		75 mm	E	General accuracy					2L	2-phase high-torque stepping
									2M	2-phase brake stepping

Specification of each unit	
A	YK-C60100
B	YK-C6075

Real product photo

Three-view Drawing YK-AB6075



YK-HXYZ6020

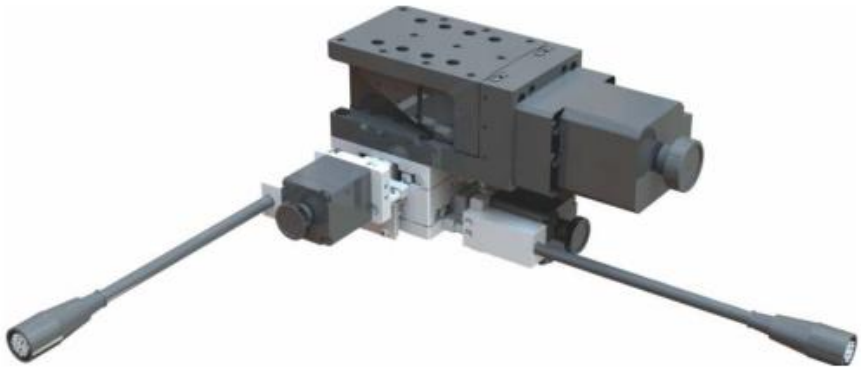
Model description

YK - H XYZ 6020 U - T 6030 - LD - LL - 2

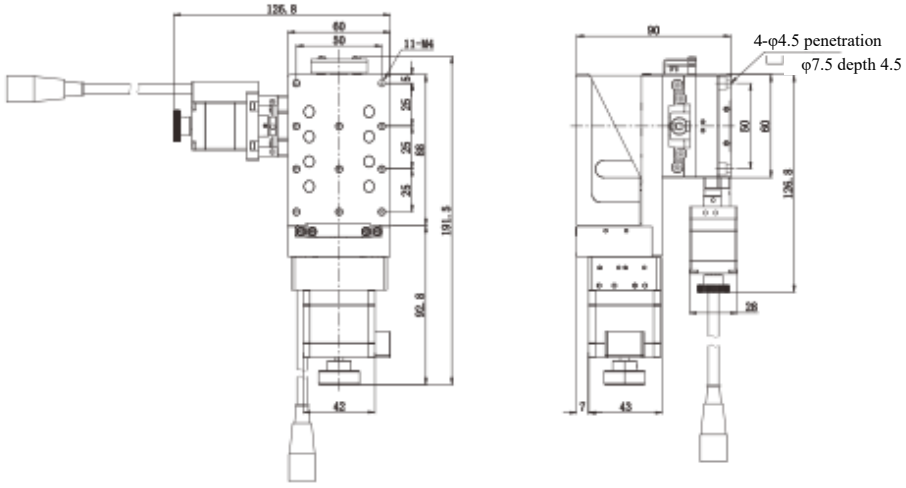
Brand logo	Type of bottom table surface		Combination method	Working face size	Accuracy class		Adapter board		Upper fine-tuning stage type	The orientation of the motor from bottom to top, based on the X motor facing downwards:		The outgoing line direction of the motor on each single unit from bottom to top:		Motor type	
YARAK	H	Enhanced type	X-linear direction	60mm	U	High accuracy	T	Use the adapter board	6030	L	Face the left	L	Left outgoing line of the motor	2	2-phase open-loop stepping
	L	Extended type	Y-linear direction	Linear axis travel	P	Standard accuracy	Blank	No configuration		R	Face the right	R	Right outgoing line of the motor	2C	2-phase closed-loop stepping
	None	Standard type	Z-Upper horizontal lifting	20mm	E	General accuracy				D	Face down			2L	2-phase high-torque stepping
			R-Upper rotating type							U	Face up			2M	2-phase brake stepping

Specification of each unit	
X	YK-L6020
Y	YK-L6020
Z	YK-ZF6010

Real product photo



Three-view Drawing YK-H-XYZ6020



YK-RAB80

Model description

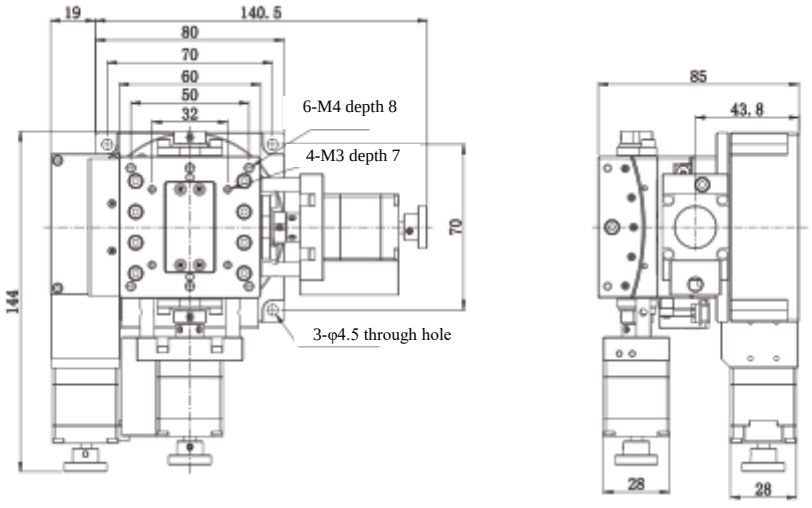
YK - RAB80 6075 U - RD - LL 2

Brand logo	Combination method	Working face width	Accuracy class		The orientation of the motor from bottom to top, based on the X motor facing downwards:		The outgoing line direction of the motor on each single unit from bottom to top:		Motor type	
YARAK	R-Lower rotating type	60mm	U	High accuracy	L	Face the left	L	Left outgoing line of the motor	2	2-phase open-loop stepping
	A-Middle arc pendulum type	Swing radius	P	Standard accuracy	R	Face the right	R	Right outgoing line of the motor	2C	2-phase closed-loop stepping
	B-upper arc pendulum type	75 mm	E	General accuracy	D	Face down			2L	2-phase high-torque stepping
	80-Lower rotating type				U	Face up			2M	2-phase brake stepping

Specification of each unit	
R	YK-R8016
A	YK-C60100
B	YK-C6075

Real product photo

Three-view Drawing YK-RAB80-6075



YK-XYR6020

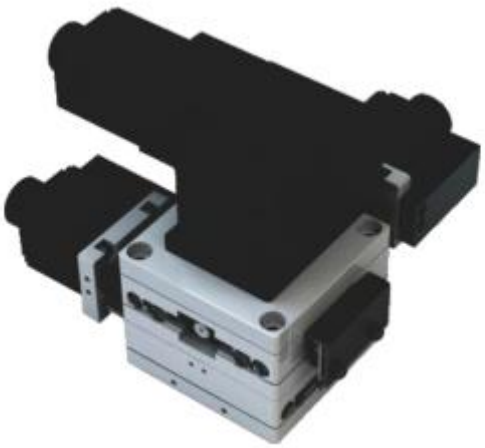
Model description

YK - XYR6020 U - T40 - LD - LL - 2

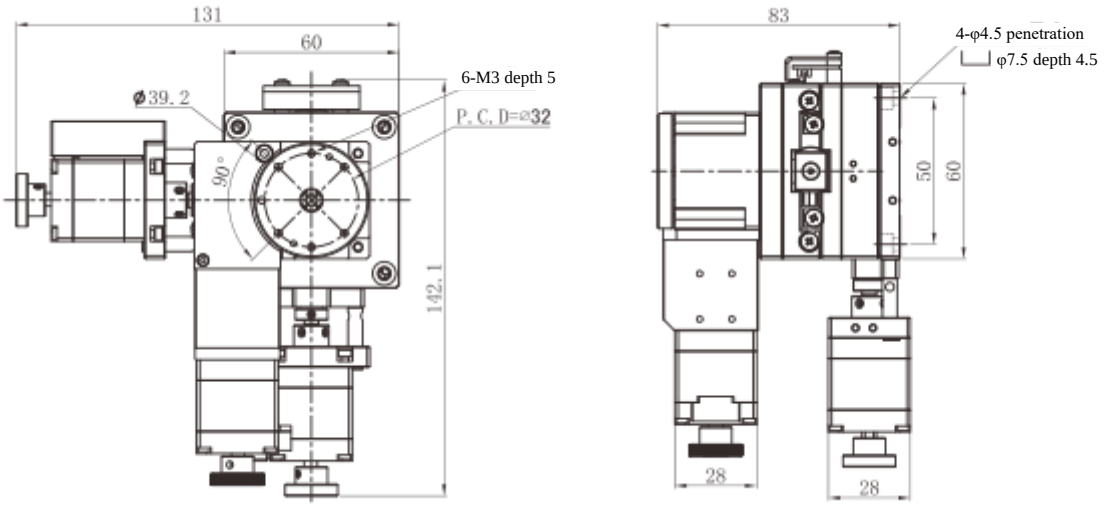
Brand logo	Combination method	Linear working face	Accuracy class		T	Gasket	The orientation of the motor from bottom to top, based on the X motor facing downwards:		The outgoing line direction of the motor on each single unit from bottom to top:		Motor type	
YARAK	X is lower linear type	60*60mm	U	High accuracy	Rotating working face		L	Face the left	L	Left outgoing line of the motor	2	2-phase open-loop stepping
	Y is middle linear type	Linear travel	P	Standard accuracy	Φ40		D	Face down	L	Right outgoing line of the motor	2C	2-phase closed-loop stepping
	R is upper rotating type	20 mm	E	General accuracy								
	40 is lower rotating type											

Specification of each unit	
X	YK-L6020
Y	YK-L6020
R	YK-R4017

Real product photo



Three-view Drawing YK-XYR6020



XXY Alignment Platform

Fine tuning, high-quality products

Floor specifications: 150, 160, 180, 250, 350, 450, 550, 600, 850 (unit: mm)

Module structuring

On the four-end planes between the base and the workbench, the XY-direction sliding tables are installed, and the special cross thick column box has module characteristics, implementing the function of XYθ structure.

High rigidity, high precision

The sliding table that constitutes the module uses cross roller guide rails, which achieve high precision and high rigidity after applying pre-pressing.

Ultra-thin, hollow structure

Support hollow, light and thin structures, and can be used as a visual or light source testing device. Easy to install, safe, highly reliably, long service life, requiring very little exception maintenance.

Complete sizes

100mm-1000mm, more suitable for higher accuracy and heavier loads.

YK-XXY150

Model description

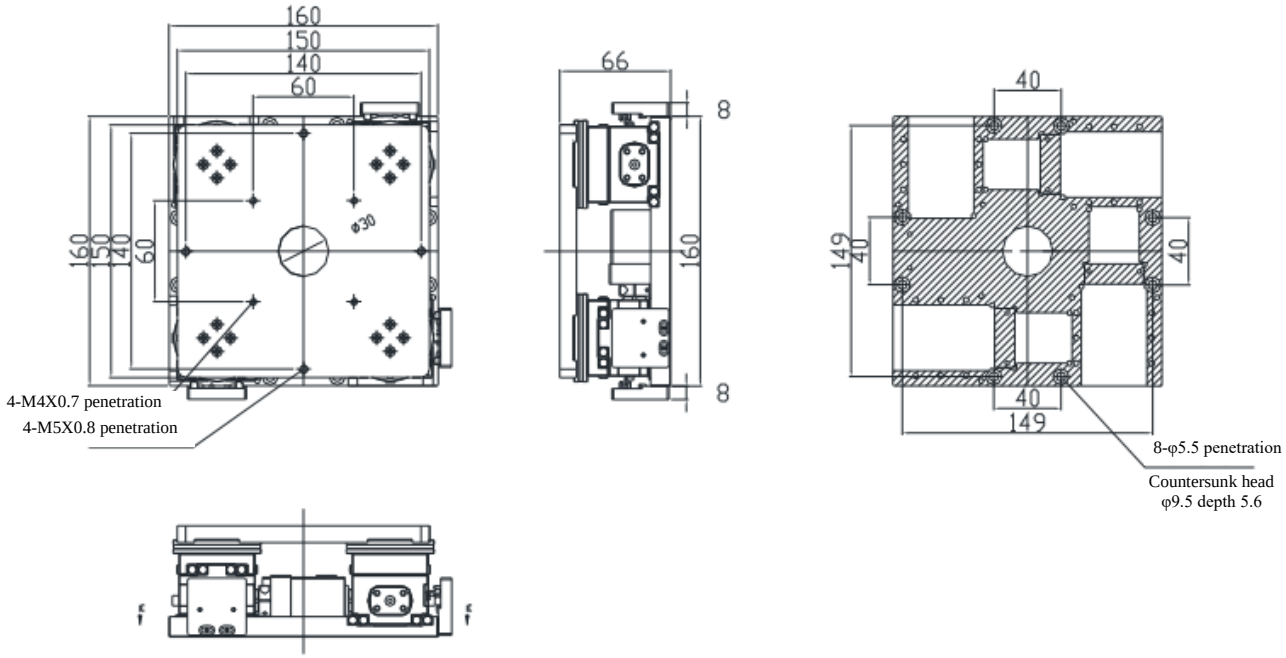
Brand logo	Type of transmission shaft	Working table size		Accuracy class		Motor type		Lead screw specification		Lead screw grade	
YARAK	XXY three axes	150	150*160mm	U	High accuracy	2	2-phase open-loop stepping	61	0601	5	C5
		160	160*160mm	P	Standard accuracy					7	C7
		180	180*190mm								

Model		YK-XXY150		YK-XXY160		YK-XXY180	
Product Dimensions	Upper table surface	150mm		160mm		180mm	
	Bottom table surface	160mm				190mm	
	Height	66mm					
Repetitive positioning accuracy		Grade U±1μm	Grade P±3μm	Grade U±1μm	Grade P±3μm	Grade U±1μm	Grade P±3μm
Stroke		±5mm					
Rotation angle		±3 °					
Screw diameter		φ6mm					
Screw lead		1mm					
Linear orbit		VR2 type					
Planeness		±0.02mm					
Parallelism of motion		±0.03mm					
Horizontal load capacity		30kgf					
Body material		Aluminum alloy					
Surface treatment		Anode black					
Body weight		5.3±2%kg					
Motor type		Two-phase stepper 28 motor					
Driver type		Please contact our engineer					
Sensor		GYQ-L10 (NPN normally closed)					

YK-XXY150

Real product photo YK-XXY150

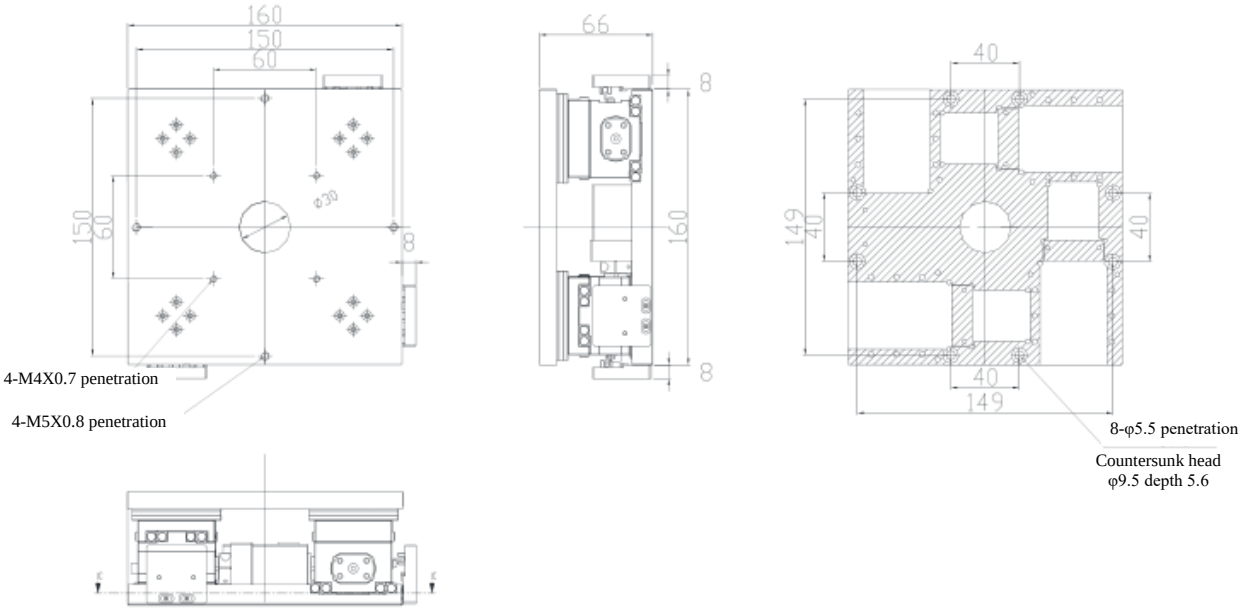
Dimensional drawing YK-XXY150



YK-XXY160

Real product photo YK-XXY160

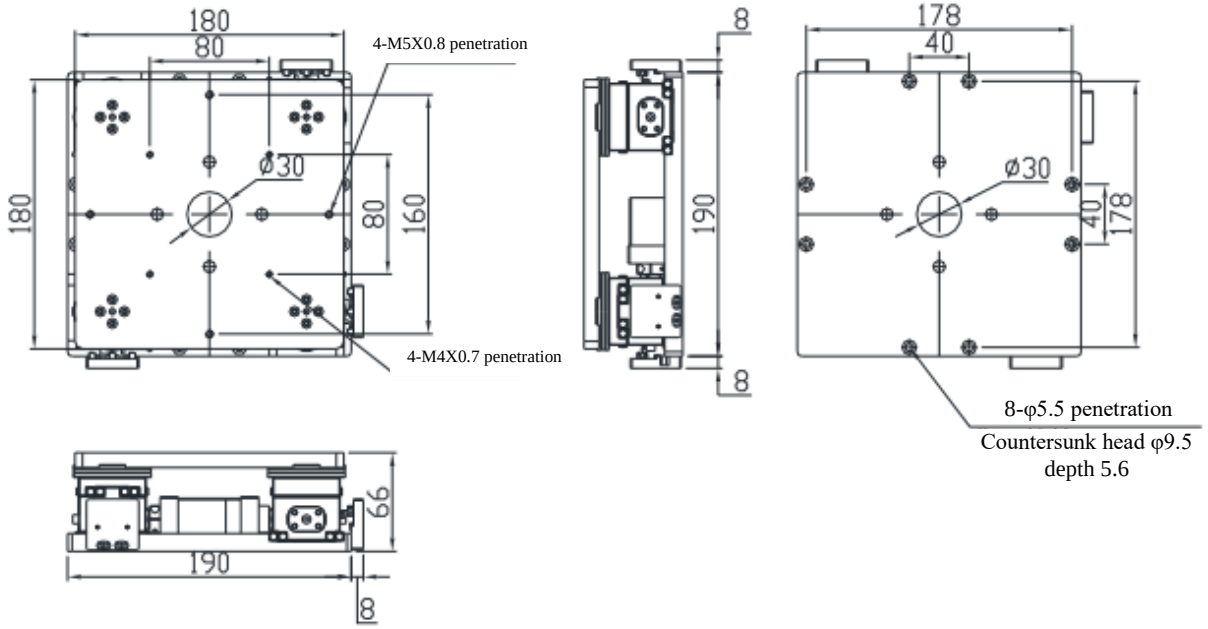
Dimensional drawing YK-XXY160



YK-XXY180

Real product photo YK-XXY180

Dimensional drawing YK-XXY180



YK-XXY series

Model description

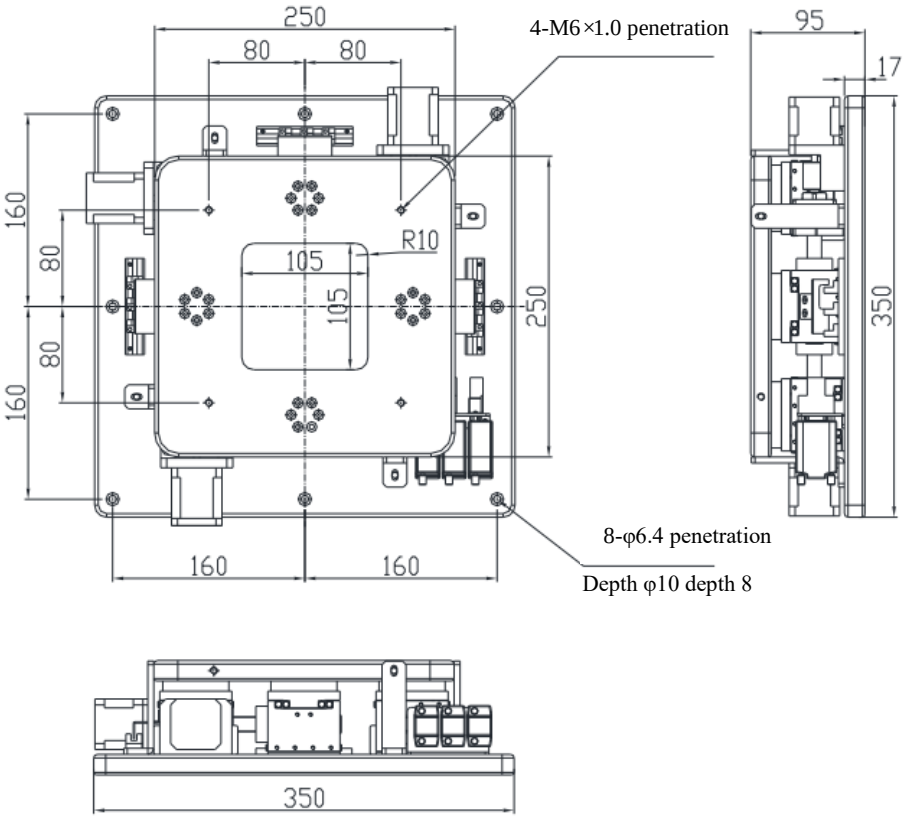
Brand logo	Type of transmission shaft	Working table size		Accuracy class		Motor type		Lead screw specification		Lead screw grade	
YARAK	XXY three axes	250	250*350mm	P	Standard accuracy	2	2-phase open-loop stepping	125	1205	5	C5
		350	350*450mm							7	C7
		450	450*550mm								

Model		YK-XXY250	YK-XXY350	YK-XXY450
Product Dimensions	Upper table surface	250mm	350mm	450mm
	Bottom table surface	350mm	450mm	550mm
	Height	95mm	105mm	
Repetitive positioning accuracy		Grade P±3μm		
Stroke		±10mm	±12mm	
Rotation angle		±5°		
Screw diameter		φ12mm		
Screw lead		5mm		
Linear orbit		VR2 type	VR3 type	
Planeness		±0.025mm	±0.03mm	±0.035mm
Parallelism of motion		±0.03mm	±0.04mm	±0.045mm
Horizontal load capacity		50kgf	80kgf	100kgf
Body material		Aluminum alloy		
Surface treatment		Anode black		
Body weight		14.2±2%kg	22.2±2%kg	26±2%kg
Motor type		Two-phase stepper 42 motor		Two-phase stepper 57 motor
Driver type		Please contact our engineer		
Sensor		PM-L25 sensor		

YK-XXY250

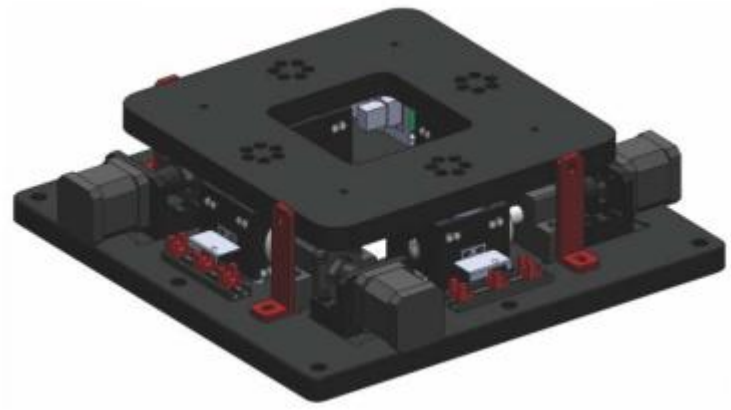
Real product photo YK-XXY250

Dimensional drawing YK-XXY250

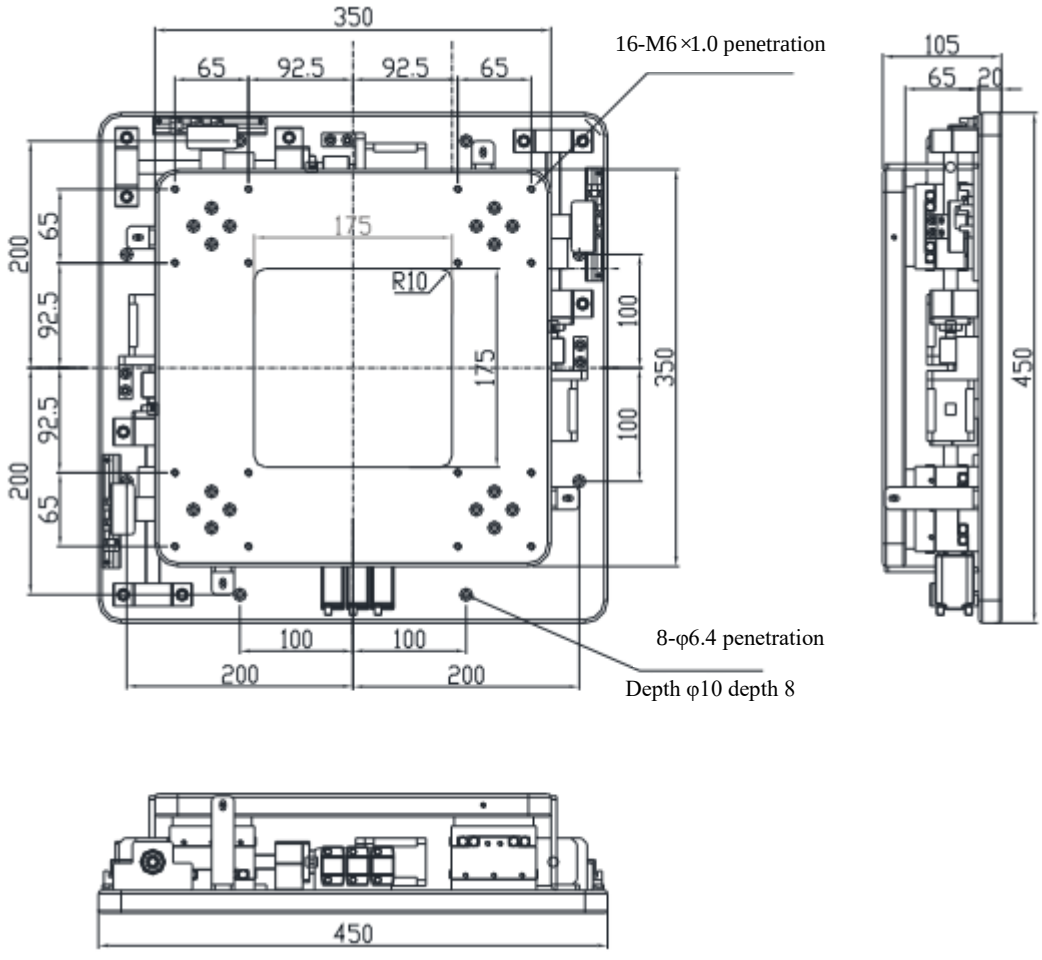


YK-XXY350

Real product photo YK-XXY350



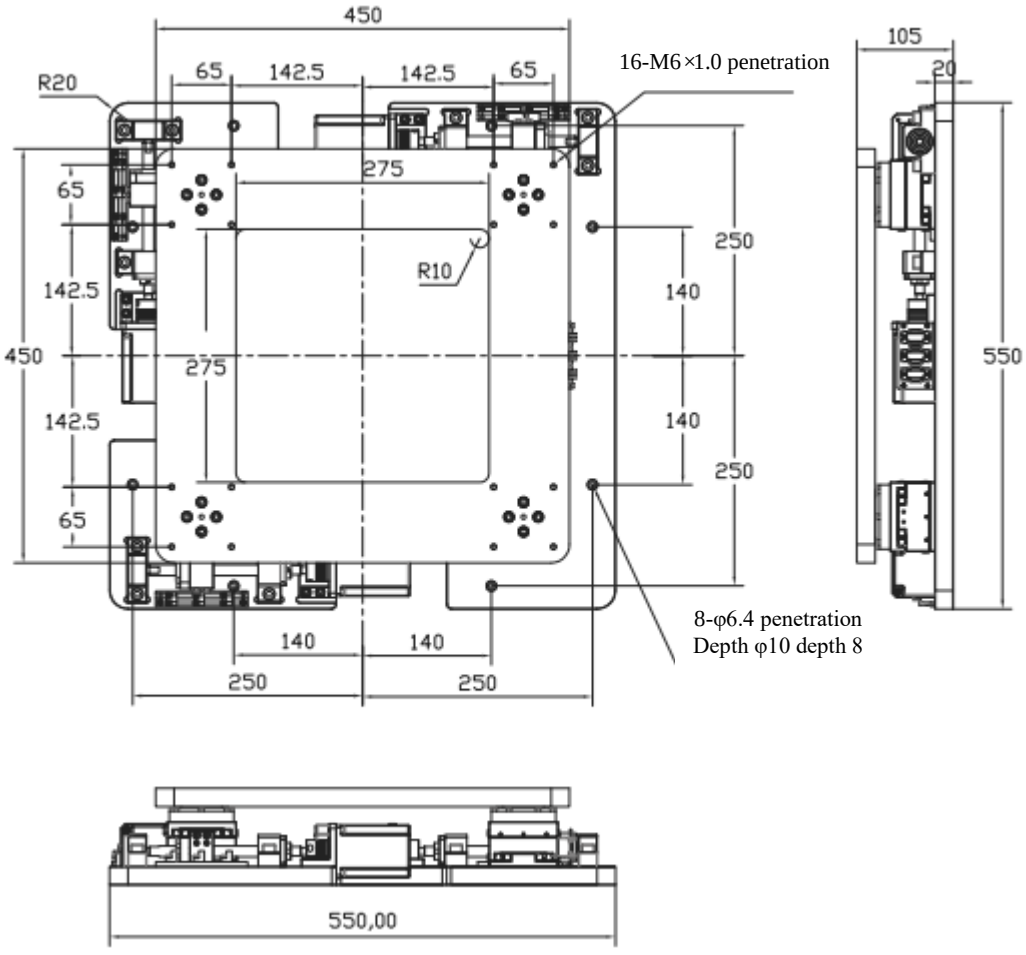
Dimensional drawing YK-XXY350



YK-XXY450

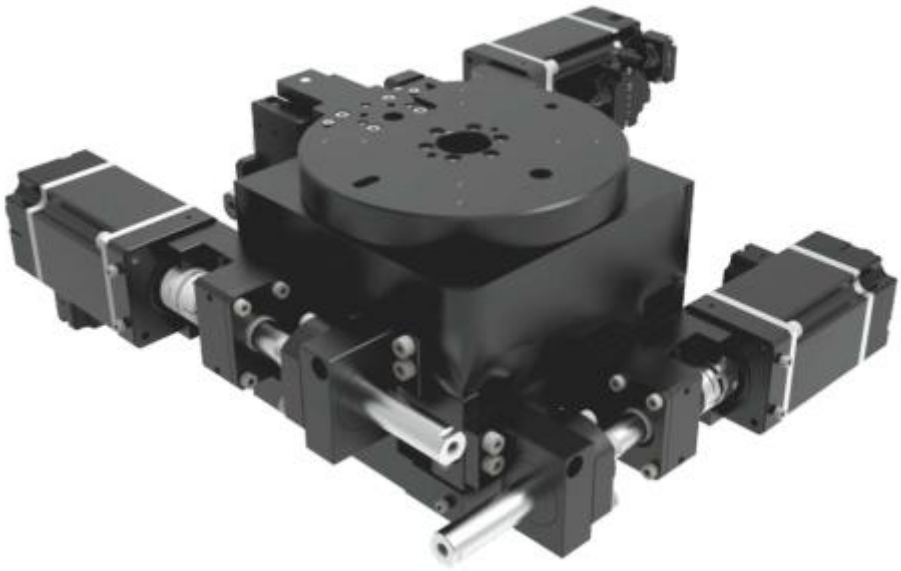
Real product photo YK-XXY450

Dimensional drawing YK-XXY450



Application Cases of Lamination Stacking Machine series

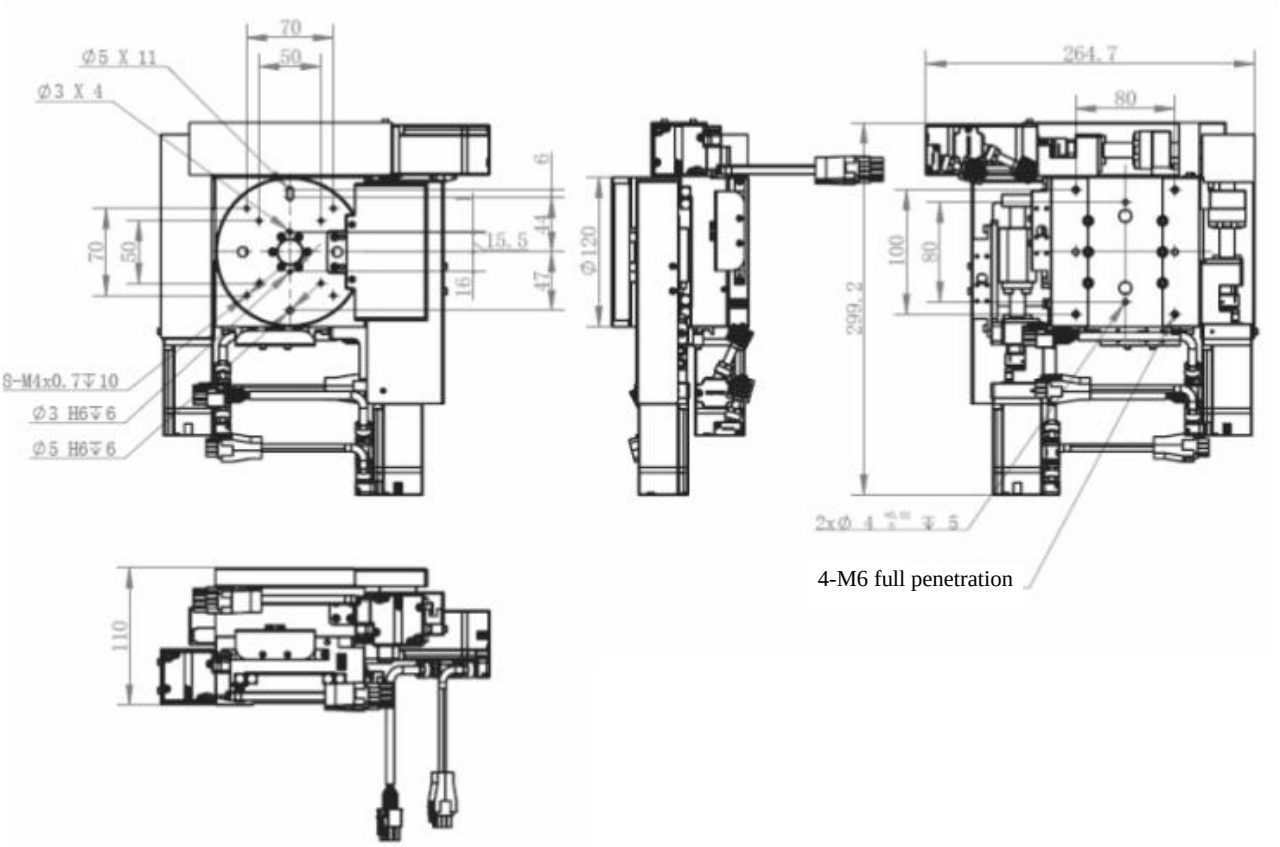
Real product photo YK-HXYR12040-UR-RDL-S1



Model		YK-HXYR12040-UR-RDL-S1
Product Dimensions	Upper table surface	φ120mm
	Bottom table surface	120*120mm
	Height	93mm
X, Y repeated positioning accuracy		±10μm
Stroke		±20mm
R repeated positioning accuracy		±0.01 °
Rotation angle		±10 °
Screw diameter		φ12mm
Screw lead		5mm
Linear orbit		Linear guide rail
Planeness		±0.025mm
Parallelism of motion		0.05mm/300mm
Horizontal load capacity		30kg
Body material		Aluminum alloy
Surface treatment		Anode black
Body weight		5±0.5%kg
Motor type		100W servo motor (supplied by customer)
Driver type		Supporting driver supplied by customer
Sensor		PM-R25 and PM-F25 (Panasonic)

Application cases of lamination stacking machine series

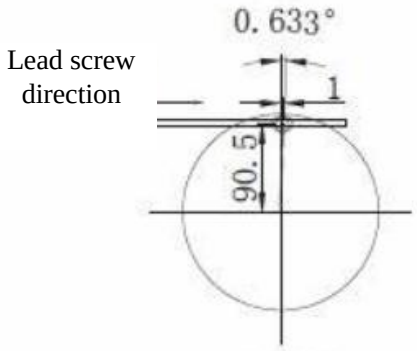
Dimensional drawing YK-HXYR12040-UR-RDL-S1



Algorithm diagram

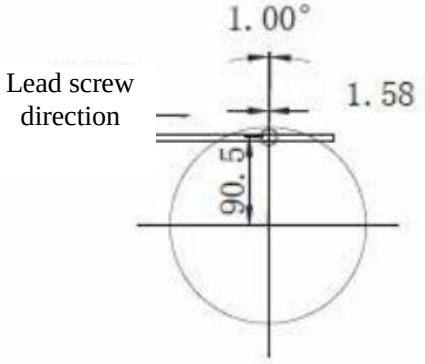
Legend:
tan θ=lead screw feed rate/rotation radius

$$\tan\theta = 1/90.5$$
$$\theta \approx 0.633^\circ$$



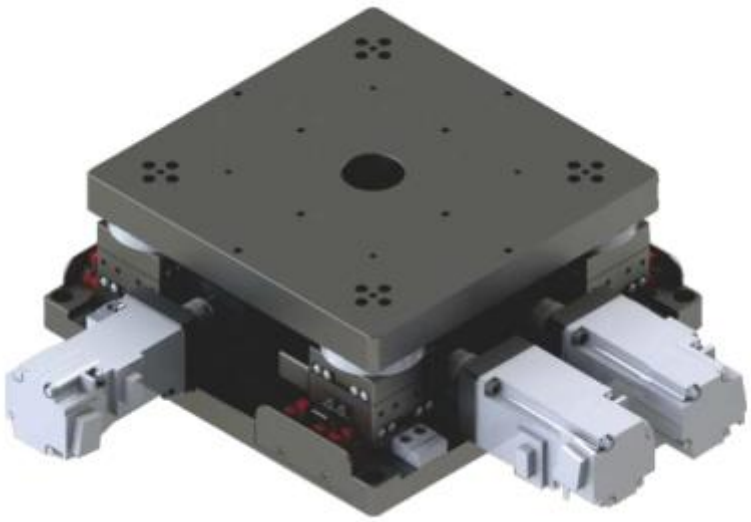
Legend:
Lead screw feed rate=tan θ*rotation radius

$$=\tan(1^\circ)*90.5$$
$$\approx 1.58$$



Application Cases of Lamination Stacking Machine Series

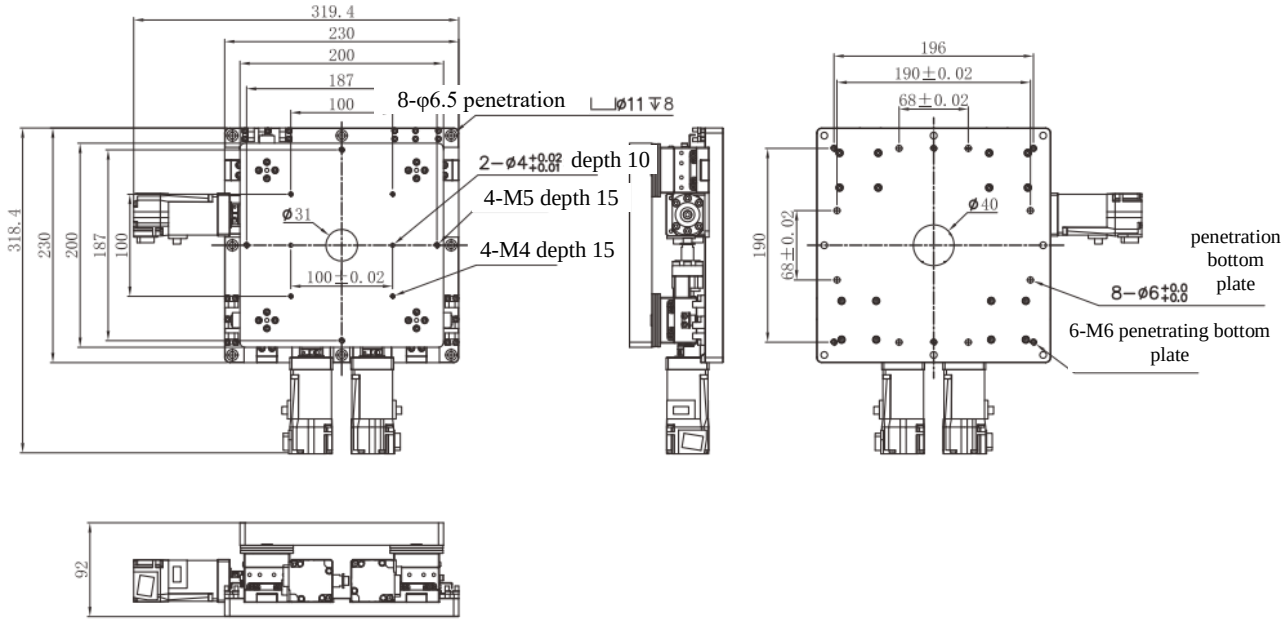
Real product photo YK-XXY200PL-S1-1257



Model		YK-XXY200PL-S1-1257
Product Dimensions	Upper table surface	200mm
	Bottom table surface	230mm
	Height	92mm
Repetitive positioning accuracy		±3μm
Stroke		±10mm
Rotation angle		±5.5 °
Screw diameter		φ12mm
Screw lead		5mm
Linear orbit		Linear guide rail
Planeness		±0.025mm
Parallelism of motion		±0.03mm
Horizontal load capacity		30kg
Body material		Aluminum alloy
Surface treatment		Anode black
Body weight		6.7±0.5%kg
Motor type		100W servo motor (supplied by customer)
Driver type		Supporting driver supplied by customer
Sensor		PM-L25 sensor

Application Cases of Lamination Stacking Machine series

Dimensional drawing YK-XXY200PL-S1-1257



Extended line and accessories

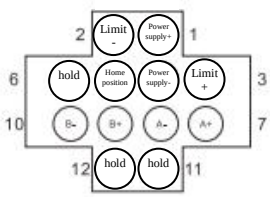
GXP-RP12S | 2

12-core high-flexibility wire

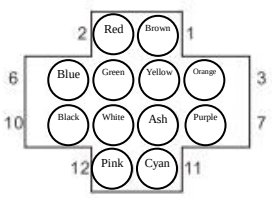
Length of extended line	
2	2 m
3	3 m

Adaptive Motorized Stage & Alignment Stage

White spot



White spot



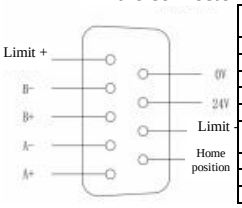
DSUB9 - F - 2

9-core high-flexibility wire

Length of extended line	
2	2 m
3	3 m

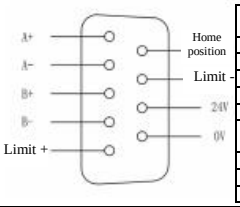
Special for alignment platform

Male connector



Pin position	Definition	Wire color
1	A+	Brown
2	A-	Orange
3	B+	Red
4	B-	Yellow
5	Limit +	White
6	Home position	Blue
7	Limit -	Black
8	24V	Purple
9	0V	Ash

Female connector



Pin position	Definition	Wire color
1	A+	Brown
2	A-	Orange
3	B+	Red
4	B-	Yellow
5	Limit +	White
6	Home position	Blue
7	Limit -	Black
8	24V	Purple
9	0V	Ash

Grating automatic platform accessories

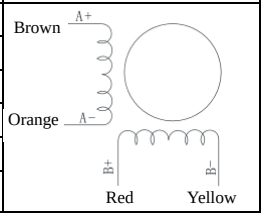
Socket accessories

Platform cable CN-RP12S

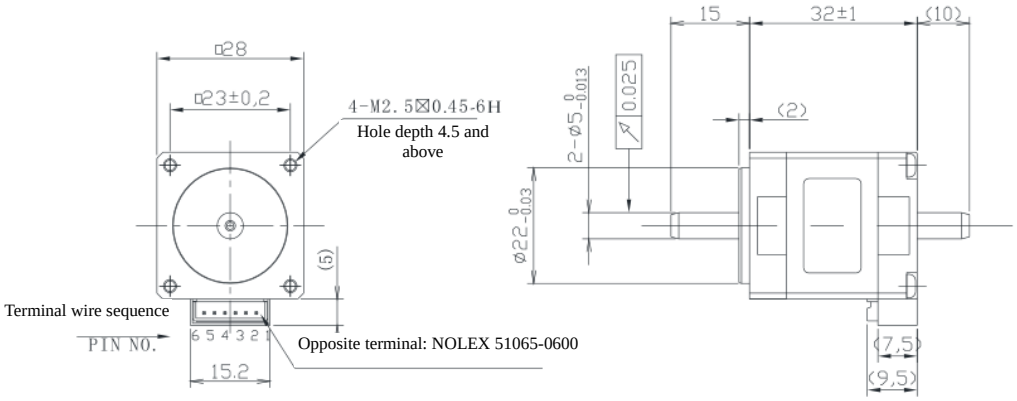
Grating signal extended line CN-DS15S

Dimensional drawings of common motors

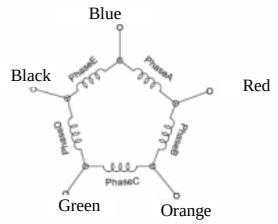
STP-28D1012-01

General technical parameters		Electrical technical parameters		Connection diagram
Stepping angle	1.8 °	Drive motor	24VDC	
Number of phases	2	Rated current	0.7A	
Insulation resistance	100MΩ MIN(500V DC)	Resistance	4.5±10%Ω	
Insulation level	Class B/winding	Inductance	3.2±20%mH	
Weight	□110g	Holding torque	0.053N. m	
Braking torque	30gf.cm REF.	Moment of inertia	About 8g.cm^2	

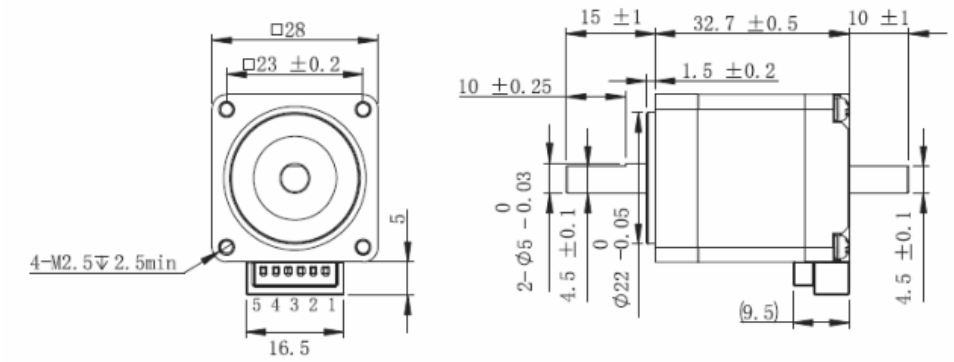
Overall dimension: unit=mm



MC528K12-01B

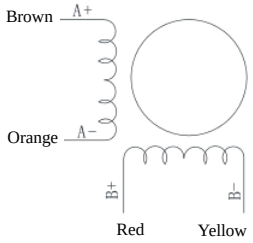
General technical parameters		Electrical technical parameters		Connection diagram
Stepping angle	1.8 °	Drive motor	24VDC	
Number of phases	2	Rated current	0.7A	
Insulation resistance	100MΩ MIN(500V DC)	Resistance	0.56±10%Ω	
Insulation level	Class B/winding	Inductance	0.2±20%mH	
Weight	About 110g	Holding torque	0.05N. m	
Braking torque	30gf.cm REF.	Moment of inertia	About 9g.cm^2	

Overall dimension: unit=mm

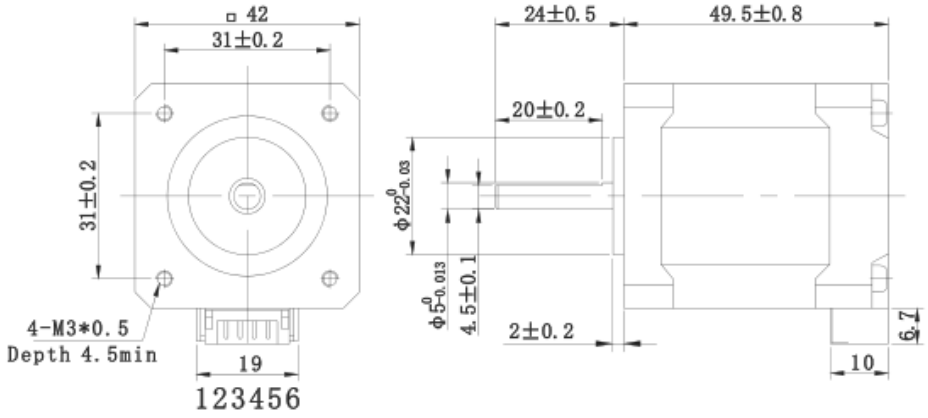


Dimensional drawings of common motors

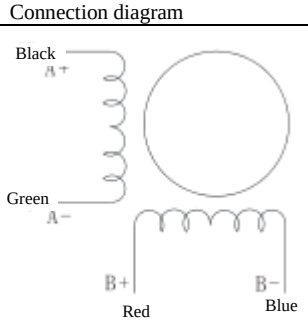
Y07-43D4-5060

General technical parameters		Electrical technical parameters		Connection diagram
Stepping angle	1.8 °	Drive motor	24VDC	
Number of phases	2	Rated current	2.0A	
Insulation resistance	100MΩ MIN(500V DC)	Resistance	1.8±15%Ω	
Insulation level	Class B/winding	Inductance	4.0±20%mH	
Weight	About 380g	Holding torque	0.054N. m	
Braking torque	300gf.cm REF.	Moment of inertia	About 66g.cm^2	

Overall dimension: unit=mm

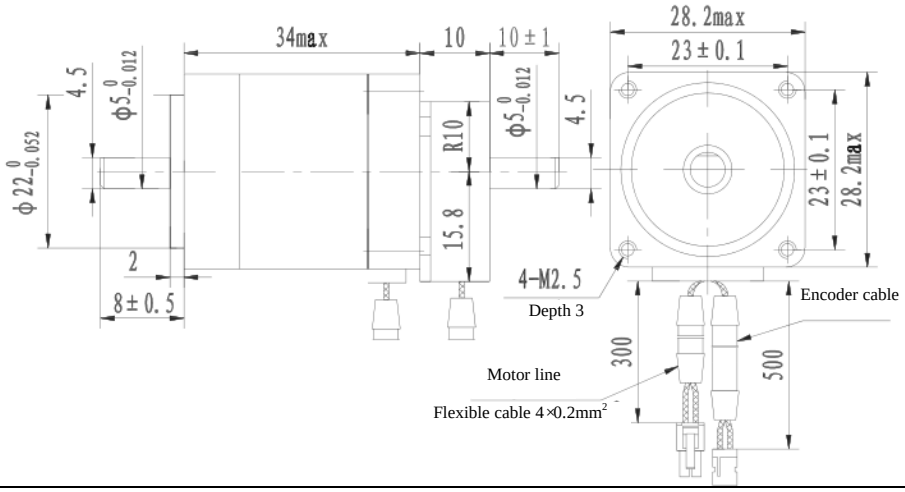


Y07-28D1-3401D-E1000

General technical parameters		Electrical technical parameters		Encoder wiring table		Connection diagram
Stepping angle	1.8 °	Drive motor	24VDC	2 Blue	A+	
Number of phases	2	Rated current	0.67A	3 Blue white	A-	
Insulation resistance	100MΩ MIN(500V DC)	Resistance	6.5±10%Ω	4 Green white	B-	
Insulation level	Class B	Inductance	3.2±20%mH	5 Green	B+	
Weight	About 140g	Holding torque	0.06N. m	6 Purple white	Z-	
Braking torque	30gf.cm REF.	Moment of inertia	9g.cm^2	7 Purple	Z+	
Supply voltage	4.5-5.5V	Current consumption	30mA	8 Black	GND	
Encoder specification	Incremental optical encoder A/B/Z 4000counts/rev			9 Red	VCC+5V	

Note: Port 1 and Port 10 (yellow and orange lines) play a shielding role and are not connected to wires.

Overall dimension: unit=mm



Schematic Diagram of Alignment Platform Algorithm

Q: How to calculate the δθ of the platform rotation (taking bonding as an example)?

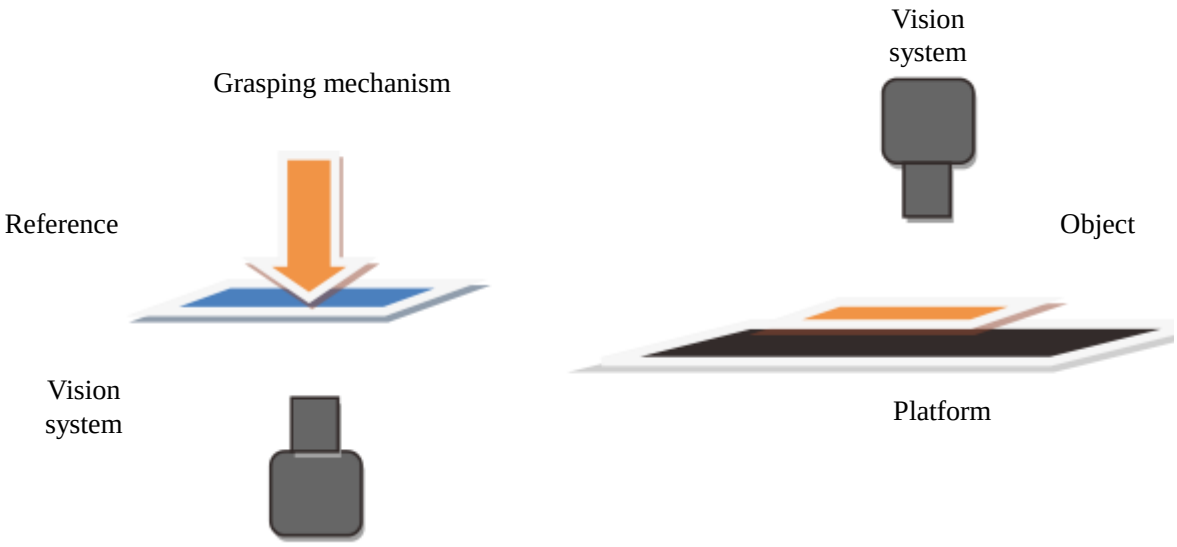
According to the formula δθ=δ6-δ5

It can be known that

A: If the product is small.

Two cameras can be used to locate the reference and object separately (usually as follows):

The schematic diagram is as follows:



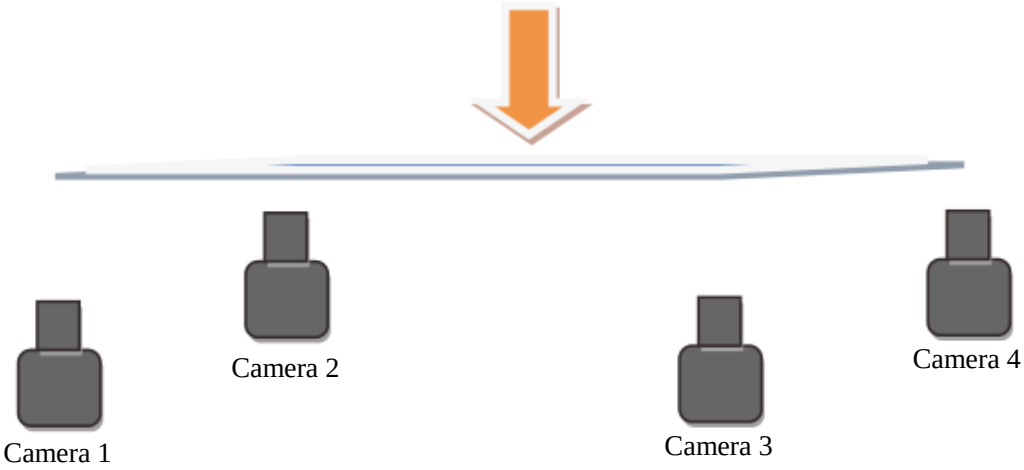
The vision system can use the template matching algorithms to calculate the coordinates (X, Y, θ) ( ) of the reference

Similarly, it can also calculate the coordinates of the object

If the product is large, the center position and angle of the product can be calculated by grasping the diagonal.

4 or 8 cameras can be used to calculate the position of 2 products.

The following is a simple model of locating the reference using 8 cameras (4 for the reference and 4 for the object)



The calculation of the relationship between the image coordinates of vision algorithm and the coordinates of motor mechanism requires the collaboration between the software engineer and the electrical engineer.

Schematic Diagram of Alignment Platform Algorithm

Assuming that the position of the object obtained by the image processing and locating method in the X0Y coordinate is (X5, Y5, δ5)

And the position of the reference obtained by the image processing and locating method in the XY coordinates is (X6, Y6, δ6)

The rotation data obtained is:

δθ=86-δ5

X=X6-X5

Y=Y6-Y5

Assuming that the initial position (it is usually set as the origin position, and needs to return to the origin after each alignment) is horizontal. At this time, it is considered that θ0=0

According to the calculation formula of UVW:

δX1=R*COS(δθ+θX1+θ0)-R*COS(+θX1+θ0)

δX2=R*COS(δθ+0X2+θ0)-R*COS(+θX2+θ0)

δY1=R*sin(δθ+θY1+θ0)-R*sin(+θY1+θ0)

θ0=0

δθ=δ6-δ5

θ×1, θ×2, θY1, and R (already provided when leaving the factory) are known.

δ×1, δ×2, and δY1 can be obtained (the unit is mm)

Then add (or subtract) the values of X and Y to obtain the actual distance (mm) that the platform needs to travel:

δX1=δX1+X

δX2=δX2+X

δY1=δY1+Y

Then the number of pulses required to drive the X1 axis to move can be calculated as:

X1(pluse)=δX1*Mp……(1)

Mp is the pulse equivalent, determined by the screw pitch and the encoder together

Similarly, the number of pulses for X2 axis to move can be calculated as:

X2(pluse)=δX2*Mp……(2)

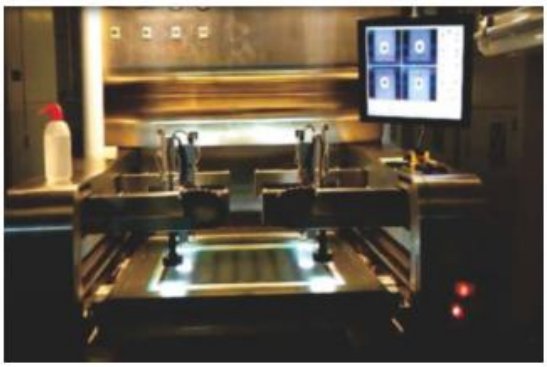
The number of pulses for Y1 axis to move is:

Y1(pluse)=δY1*Mp……(3)

Visual Alignment System Solution

CCD alignment system

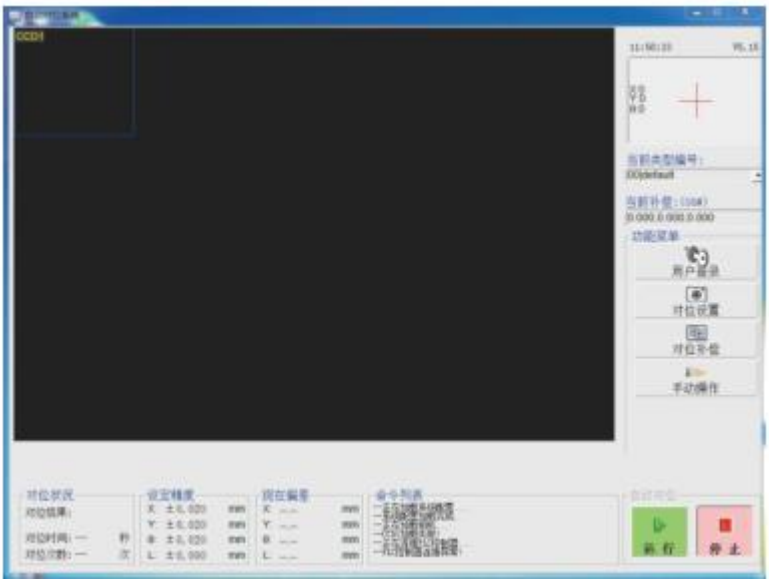
■ CCD automatic alignment



● System advantages:

1. CCD image processing is fast and accurate, not limited by images, and any image can be used as the target;
2. The number and parameter settings of CCD cameras can be freely matched, supporting up to 6 cameras;
3. Visual alignment algorithm with high accuracy, high efficiency, and high stability;
4. The parameter codes of each product can be saved, and be directly called when the product is produced next time, not requiring repeated machine adjustment;
5. Stable and efficient production can be realized, and CCD shooting only takes less than 0.5 second to complete the processing;
6. Open the commonly used PLC communication protocols in the industry, supporting hardware self-selection by customers;
7. The independently designed algorithm library for alignment platform products, combined with the XYθ-direction offset provided by CCD photography, can automatically control the reverse movement amount of the mobile platform, correct the position of the measured object, and achieve accurate automatic positioning.

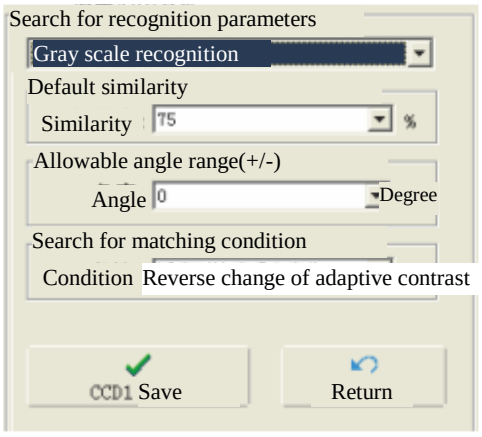
■ Interface function analysis



(Automatic alignment system interface)

● Image recognition; gray scale recognition and pattern recognition two categories can be selected;

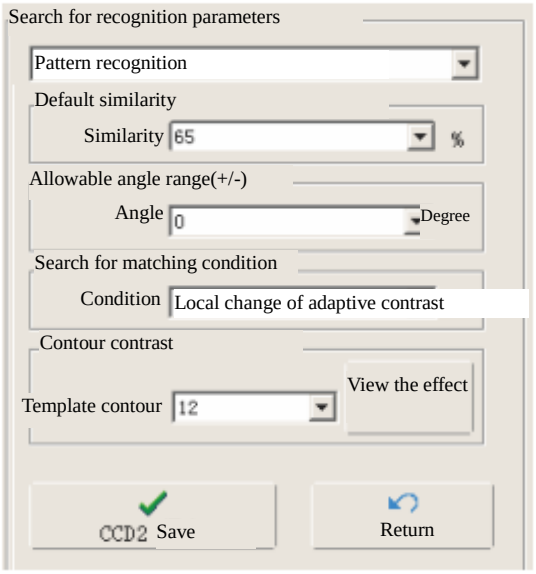
1. Gray scale recognition: Mainly used to identify the images with unclear and irregular contours; the advantage is high recognition rate, and the disadvantage is the accuracy is slightly lower. The gray scale recognition parameter settings are shown in the following figure:



(Gray scale recognition)

Visual Alignment System Solution

2. Pattern recognition: Mainly used to identify the images with unclear and irregular contours; the advantage accuracy is high, but the disadvantage accuracy is slightly lower. The pattern recognition parameter settings are shown in the following figure:



(Pattern recognition)

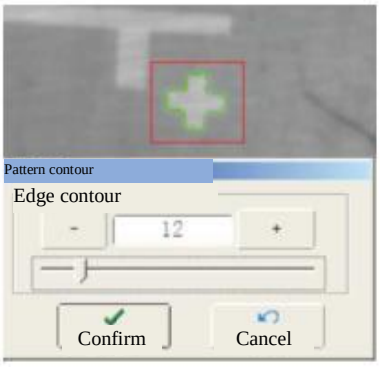
Default similarity: The default similarity at the time of creating the template; the created template needs to set similarity values in the template candidate list column; similarity refers to the similarity score condition when using a template for matching and recognition, and the higher the set value is, the more accurate it is. However, when the image effect is poor, it will become more sensitive, and the image cannot be recognized; the lower the set value is, the higher the recognition rate is, but there is a possibility of recognition errors; it depends on the actual situation of the image. In brief, the similarity shall be set as high as possible when the images can be correctly recognized;

Allowable angle range: When the image target is an asymmetric pattern with angle changes, the allowable angle range shall be set. The larger the set angle range is, the longer the image search time will be, and it is generally recommended that it should be set to zero unless the image angle change is significant; if it is a circular or symmetrical target, it can be set to zero;

Contour contrast: Extract the contour values of the pattern recognition, click to view the effect, and drag the scroll bar as shown in the figure to extract the contour of the Mark pattern to an appropriate position.

Remarks

1: The recognition parameters of each CCD can be independently set;
2: The recognition parameters for each candidate list template can also be independently set;



(Edge contour)

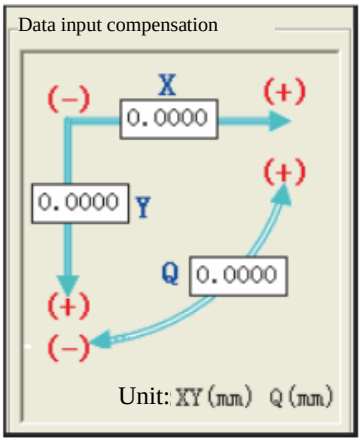
● The interface can independently set the correction range, determine the accuracy, display the deviation value, and make alignment compensation based on the displayed value, so the accuracy is higher;

Alignment compensation refers to the compensation for the alignment position when the alignment is completed and OK. This system has data input compensation and specified compensation position on the alignment compensation function. Click the "Alignment Compensation Function" on the main screen to enter the alignment compensation function screen, as shown below.

(Alignment compensation function screen)

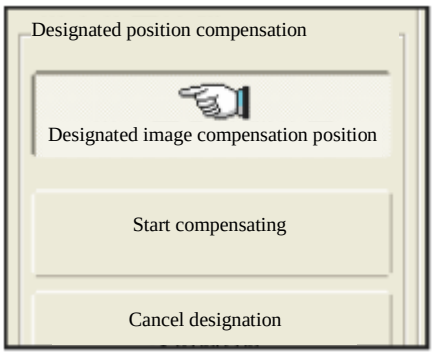
Visual Alignment System solution

1. Data input compensation: Corresponding compensation data can be input according to the actual situation for compensation, suitable for position adjustment with small deviation; corresponding compensation data can be input according to the actual situation, and the direction of the compensation position is determined by the positive or negative of the written data. After completing the movement, click "Save Compensation" to save the above set compensation data to the system.



(Data input compensation)

2. Designated position compensation: It can automatically compensate for the designated position and automatically save the compensation amount, suitable for the position adjustment with large deviations.



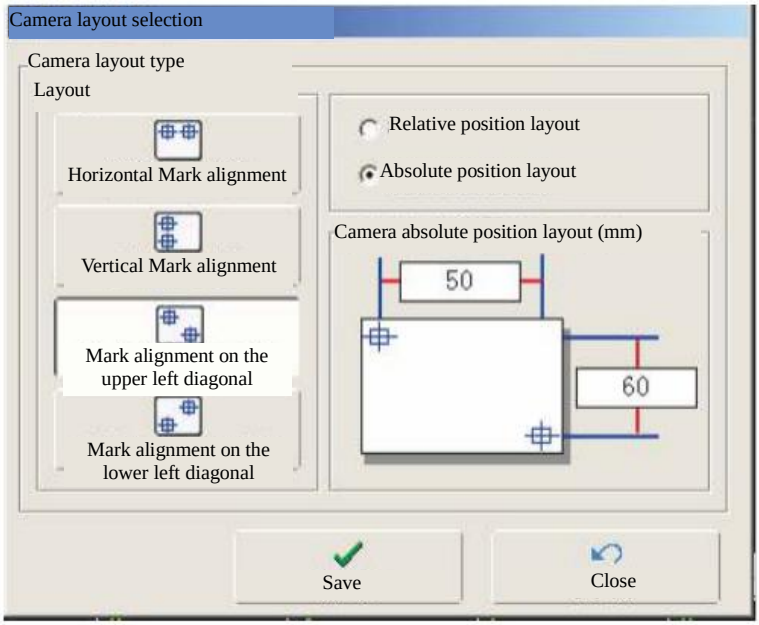
(Designated position compensation)

The compensation data corresponding to the above position compensation function can be written with different numbers and saved in the system.

Remarks: The compensation in the X, Y, and θ directions is based on the center position between CCD; when the compensation number is not visible, it means that this function is not turned on for the system.

● Simple camera layout setting

When the system is in 2-CCD alignment mode, the camera layout should be selected according to the actual camera orientation. When the installation distance between the cameras is uncertain, select "Relative Position Layout" for the system to judge automatically. If the camera installation position is known, select "Absolute Position Layout" and enter the corresponding camera distance;



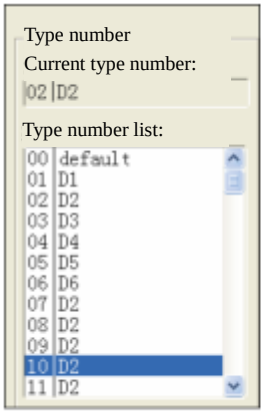
(Camera layout selection)

Remarks: If the camera position is fixed, after this option is selected, there is no need to set it again.

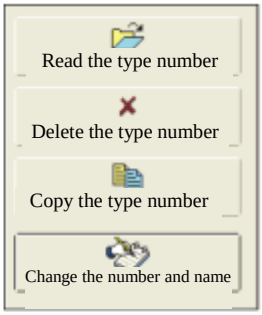
Visual Alignment System Solution

● Convenient type numbering

It can support the storage and use of 100 product numbers from 0 to 99. After the parameters of a product are adjusted, a product type number can be saved, and it can be directly called when this product is manufactured next time.



(Type number operation interface)



(Type number list)

After entering the window, you can see the type number area on the right side of the window. Its functions are shown in the following table:

Current type number	Product type number currently in use
Type number list	This alignment system can support the storage and use of 100 product codes from 0 to 99
Read the type number	Click to read all data from the selected type number in the type number list to the type number currently in use
Delete the type number	Click the center of the window and the prompt box will pop up, as shown in the figure. Click "Yes" to delete the selected type number from the type number list; or click "No" to abandon deletion
Copy the type number	Click the right side of the window and it will be automatically turned into the screen as shown in the figure, and you can copy all data from any item in the type number list to another selected type number in the list
Change the number and name	Click and the type number input soft keyboard will pop up, and you can modify the input type number and name according to the actual requirements and save them
Save the type number	Save the above settings
Return	Return to the main screen

Visual Alignment System Solution

YK-S3131

Model	YK-S3131	
Chassis	Color	Silver white/Black is optional
	Dimensions	132* 128*42mm (L*D*H)
	Structure	All-aluminum heat dissipation structure without fan
	Material	Aluminum profile
Performance	Processor	Intel Brodwell Celeron N3160 CPU (quad-core quad-threading)
	Graphics card	CPU is integrated with Intel HD 400 high-performance core graphics card
	Memory	Notebook DDR3, supporting up to 16G
	Storage	Support M-SATA solid-state drive
System features	Network	2 Gigabit network ports
	USB	4*USB2.0
	Serial port	1*COM
	Display	VGA+HDMI
	Audio	1*Line-out, 1*Mic-in
	Indicator light	Power indicator light
	System control	Power switch
	GP10	Built-in 4 incoming and 4 outgoing needles
	Wireless	WIFI/3G (optional)
Power supply	Power supply	DC12V5A power supply
Reliability	Installation method	Wall-mounted or flat type
	Operation temperature	0℃~60℃
	Storage temperature	-20℃~70℃

YK-310D-H11

Model	YK-310D-H11	
Chassis	Color	Bright silver
	Dimensions	242*247*93mm(L*D*H)
	Structure	Heat dissipation structure with fan
	Material	Galvanized steel sheet
Performance	Processor	Support generation-6/7 Conroe I3/I5/I7
	Graphics card	CPU integration
	Memory	Desktop DDR4, supporting up to 32G
	Storage	Support M-SATA solid state drives or 2.5-inch hard drives
System features	Network	2/4 Intel Gigabit network ports (expandable to 6 network ports)
	USB	4*USB3.0+2*USB2.0
	Serial port	5*COM
	Display	VGA+HDMI+DP
	Audio	1*Mic-in+1*Line-out
	Expansion slot	3MINI-PCIE(1 is M-SATA)
	Indicator light	Power indicator light
	System control	Power switch
	GP10	Built-in 4 incoming and 4 outgoing needles
	Wireless	WIFI/3G
Power supply	Power supply	180W power supply
Reliability	Installation method	Wall-mounted or flat type
	Operation temperature	0℃~60℃
	Storage temperature	-20℃~70℃

YK-P4133

Structure parameters	
Front panel level	The shell adopts aluminum magnesium alloy structure and has a fan for active heat dissipation
Installation method	Support wall-mounted and standing (embedded method is optional)
Panel color	Black/silver white is optional
Power input	DC 12V, 5A
CPU	Intel i5-4300U, dual-core quad-threading 1.9GHz, Turbo Boost and overclocking 2.9GHz
Chipset	Intel Hawell-U/Broadwell-USOC
Graphics card	Integrated Intel HD Graphics 4400 core graphics card
Memory	Support DDR3 notebook memory
Hard drive	Support M-SATA solid-state drive
Onboard network port LAN	2 Intel 211 Gigabit network ports
Audio	Realtek ALC662 chip, providing 6-channel output
External interface	2*COM(RS232), 4*USB
	2*LAN, 1*Audio, 1*VGA, 1*HDMI
Optional interface	WIFI (optional)
Display	12.1 Diagonal TFT color industrial display screen
Display aspect ratio	4:03
Display screen resolution	1024x768
Touch screen type	4-wire resistive touch screen (USB)
Surface hardness	3H
Response time	<5ms
Light transmittance	81%
Operation temperature	0℃~50℃
Storage temperature	-10℃~60℃

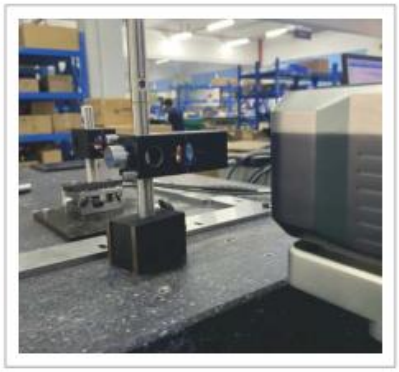
YK-D1818

Model	YK-D1818	
Chassis	Color	Black
	Dimensions	224*200*88mm(L*D*H)
	Structure	Heat dissipation structure with fan
	Material	Steel plate
Performance	Processor	Intel H81 high-speed chipset, supporting fourth-generation i7/i5/i3 processing
	Graphics card	CPU integrated with Intel HD high-performance core graphics card
	Memory	Desktop DDR3, supporting up to 16G
	Storage	Support M-SATA solid state drives or 2.5-inch hard drives
System features	Network	2*Intel Gigabit network ports
	USB	4*USB3.0+2*USB3.0
	Serial port	5*COM
	Display	2*VGA
	Audio	1*Line-out
	Expansion slot	2MINI-PCIE(1 is M-SATA)
	Indicator light	Power indicator light
	System control	Power switch
	GP10	Built-in 4 incoming and 4 outgoing needles
	Wireless	WIFI/3G (optional)
Power supply	Power supply	180W power supply
Reliability	Installation method	Wall-mounted or flat type
	Operation temperature	0℃~60℃
	Storage temperature	-20℃~70℃

Description of Test Methods

◆ Accuracy test

The laser interferometer can be used in combination with various refractors, reflectors, etc. to measure the linear position, velocity, angle, flatness, straightness, parallelism, and perpendicularity, and can also be used in calibration of precision machine tools or measuring instruments.



◆ Operation interface

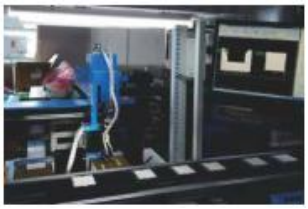
The products developed by the Company all undergo strict aging test before leaving the factory to make the defects appear in a short period of time by overloading the electronic products and various precision components, so as to avoid malfunctions during use and continuously improve the excellent performance of the products.

◆ Product aging test

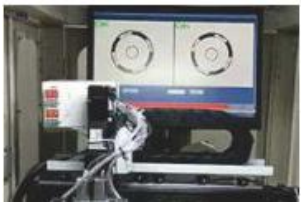
◆ Test data report

Visual Alignment System Solution

■ Electronic manufacturing industry



CCD automatic alignment backlight bonding



Mobile phone lens cone dual-suction pen flying wobble plate

CCD positioning mobile phone lens assembly

Double-station lithium battery CD automatic alignment lamination stacking machine

Lithium battery CCD automatic alignment lamination stacking machine

Vision guided thermometer labeling

CCD high-speed dispensing machine

Multi-head vertical CCD visual automatic soldering robot

■ Manipulator intelligent equipment industry

ABB manipulator notebook accessories bonding application

6-axis manipulator notebook accessories bonding

Vision guided manipulator backlight electrical logging application

Vision guided manipulator screwing

Automatic positioning and bonding system for leather

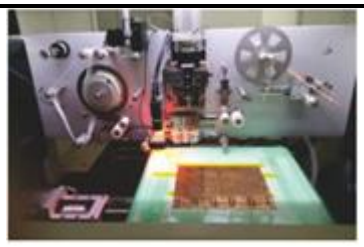
Automatic positioning and bonding system for cartons

CCD automatic positioning mobile phone accessories assembly application

CCD automatic tracking and positioning product sorting application

■ PCB industry

PCB hot melt machine application



Fully automatic sticker stamping machine for FPC flexible circuit boards

FPC steel sheet reinforcement machine

Visual Alignment System Solution

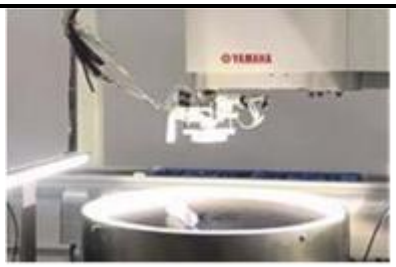
■ Exposure machine

Visual resistance welding machine

Visual circuit machine

CCD automatic alignment exposure machine

■ Food and pharmaceutical industry



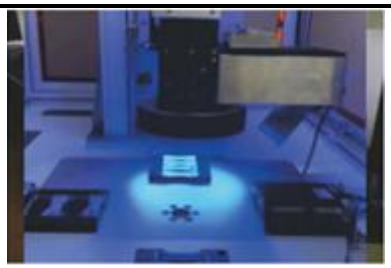
Medical device sorting

Medical metal needle assembly equipment

Cardiac surgical instrument assembly

■ Laser application industry

Mobile phone speaker welding application



Visual guided laser marking application

Laser Kings visual marking hardware industry application

Customer Consultation Center
Catalog request, technical consultation, product clarification

400-960-1069 Sales Hotline

For more newer consultation with Kaifull, please scan the QR code to follow up

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Boosting the world's intelligent factory, intelligently creating a beautiful and happy life

GUANGDONG KAIFULL ELECTRONICS TECHNOLOGY CO., LTD.

Tel: 400-960-1069
Official website: www.kaifull.net
Dongguan headquarters: Kaifull Science and Technology Park, No. 5 Gaolong East Road, Gaobu Town, Dongguan City, Guangdong
Suzhou branch address: 611, Block A, Zhongbo Science and Technology Park, No. 999 Donghuan South Road, Guoxiang Street, Wuzhong District, Suzhou
Address of Wuhan Branch: 1806, Building B, Optics Valley Times Plaza, No. 111 Guanshan Road, Hongshan District, Wuhan

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