

**LIMON**  
PRECISION & SPEED

**LIMON AUTO TECH CO., LTD.**

**LINEAR PRECISION LINEAR SPEED**

**ELECTRIC TWO FINGER PARALLEL GRIPPER**



[www.limonrobot.com](http://www.limonrobot.com)

# Limon

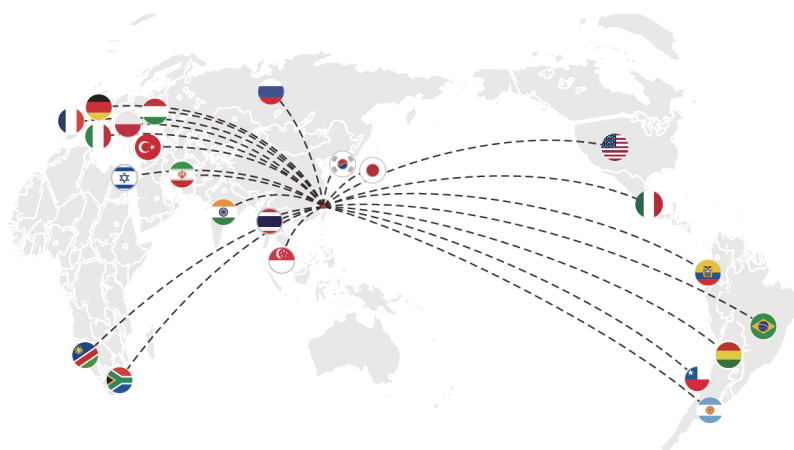
## Pioneering Smart Manufacturing in China



Established in 2013, Limon headquartered in the port city of Ningbo, China, specializes in smart manufacturing. With robust independent research and development capabilities, Limon has successfully introduced automation system solutions widely applied in key sectors such as new energy batteries, new energy vehicles, photovoltaics, 3C electronics, semiconductors, LCD panels, biomedicine, and engineering machinery, demonstrating strong market competitiveness.

### Global Business Deployment

Limon adheres to a customer-centric service philosophy, establishing service points nationwide to provide customers with prompt and professional technical support and services. Moreover, Limon actively expands into international markets, with business operations covering over 30 countries and regions globally, delivering more than 2300 innovative solutions to customers worldwide and earning extensive international acclaim.



## Gathering Elite Talent in the Intelligent Equipment Industry

Driven by innovation, Limon has assembled a core technical team composed of renowned experts from both domestic and international arenas, focusing on underlying automation technologies, continually innovating and iterating to deliver products with outstanding performance, excellent quality, and high cost-effectiveness to customers.



## "Full-Cycle, Full-Process, All-Around" Service

### ○ Project Manager Service System

Limon implements a project manager service system, taking full responsibility for pre-sales consultations, product selection, order processing, logistics, and other aspects to ensure on-time delivery.

### ○ Professional After-Sales Customer Service Team

Limon boasts a professional customer service team, promptly responding to customers' after-sales needs to ensure efficient and high-quality service.

### ○ 30-Day Free Sample Loan

Customers interested in showcasing and testing products can consult Limon's sales engineers for complimentary sample loans.

### ○ Exhibitions/Networking Events

Limon regularly participates in industry exhibitions and hosts peer networking events, actively engaging in industry technical discussions and knowledge sharing.



## Electric gripper

Electric gripper is a device specifically designed for automated part handling in robots. Its working principle is based on translational motion, which is controlled by a servo motor to move the gripping part of the gripper in a straight line direction. This allows for the efficient handling and operational demands of objects of various shapes and sizes in highly automated environments.

Electric grippers usually consist of three major parts: the clamping mechanism, driving mechanism, and control system. The clamping mechanism directly contacts the target object and performs grasping actions. The driving mechanism provides power to enable the clamping mechanism to move along a predetermined path. The control system receives external instructions, controls the actions of the driving mechanism, and ensures the accuracy and stability of the grasping process.



**Integrated  
driving and control**



**Precision  
control**



**Lightweight  
design**

**High lifespan**

**Low  
maintenance**

# Product features

## **Movement speed adjustment: efficient and precise, with strong adaptability**

The electric gripper has a highly flexible speed adjustment function, which can accurately match different scenarios and workpiece characteristics, achieve fast and stable clamping and handling tasks, and significantly improve production efficiency.

## **Torque clamping control: fine and stable, safe and reliable**

The electric gripper can adapt to workpieces of various sizes, shapes, and weights through precise torque adjustment. This ensures the stability and safety of clamping, effectively preventing the sliding or damage of workpieces during transportation.

## **Smooth control of acceleration and deceleration: reducing impact and improving quality**

The electric gripper achieves precise control of acceleration and deceleration, ensuring smooth transitions during startup, operation, and stop. This reduces the impact of vibration on both the workpiece and the gripper itself, ultimately improving the quality of the workpiece.

# Product Advantages



## Integration and Deployment

Standardized protocol interfaces, plug-and-play, efficient integration and deployment, shortened cycles, enhanced efficiency.

## Operational Experience

Convenient commissioning software, intuitive interface, powerful functionalities, supports online upgrades and remote commissioning, optimizes operational status.

## Motion Control

High-precision force control, position and velocity mechanisms, intelligent feedback, meets the demands of high-end manufacturing.

## Expansion and Compatibility

Integrated control, flexible expansion, supports multiple communication protocols, enhances system performance and stability.

## Safety Assurance

Power-off self-locking, power-on unlocking, effectively prevents accidents, ensures equipment stability.

## Durability and Maintenance

Optimized design, high-quality materials, multi-stage point control, reduces maintenance costs.

## Data Processing

High-performance controllers, powerful processing chips and algorithms, shared memory technology, ensures high-speed stable operation.

## Communication Capability

Supports multiple communication protocols, stable and high-speed communication, interference-resistant technology enhances reliability.

## Intelligent Management

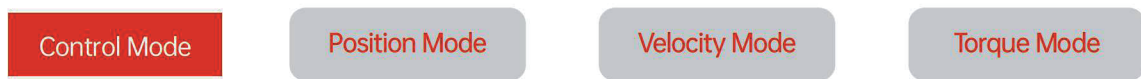
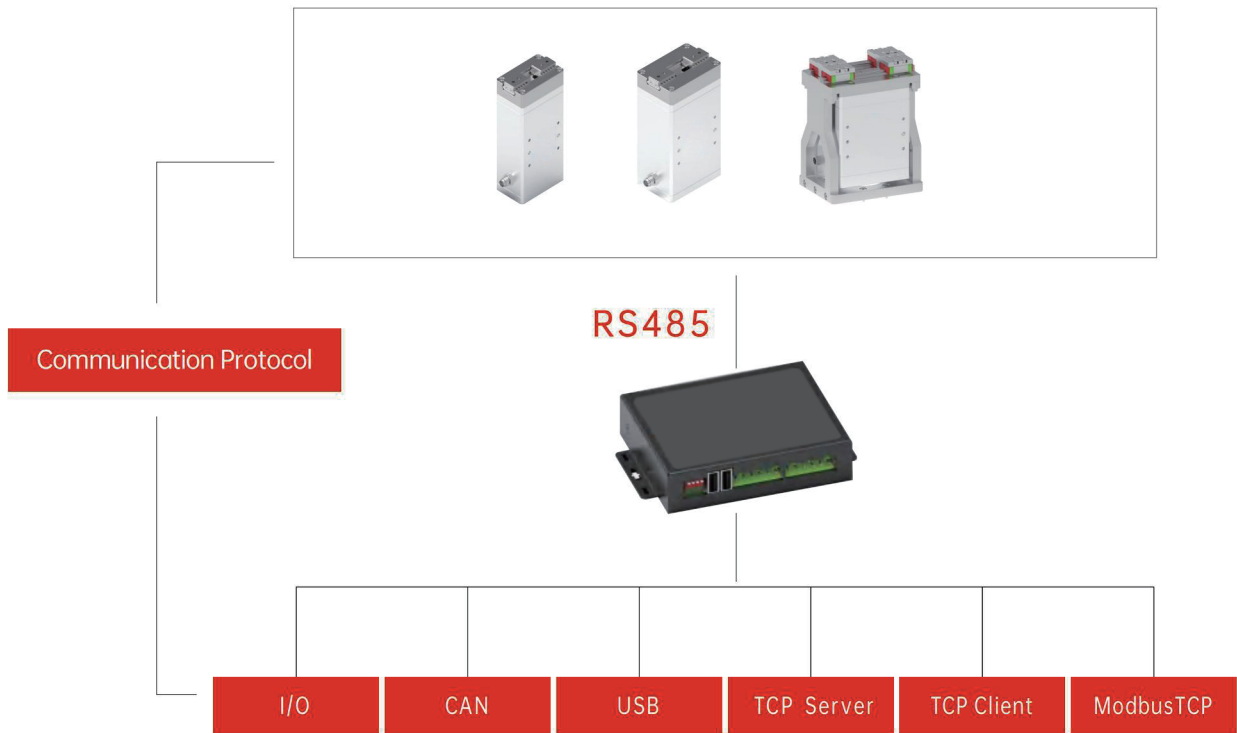
Remote monitoring and management, intelligent warning system, achieves real-time control and problem alerts.

## After-sales Service

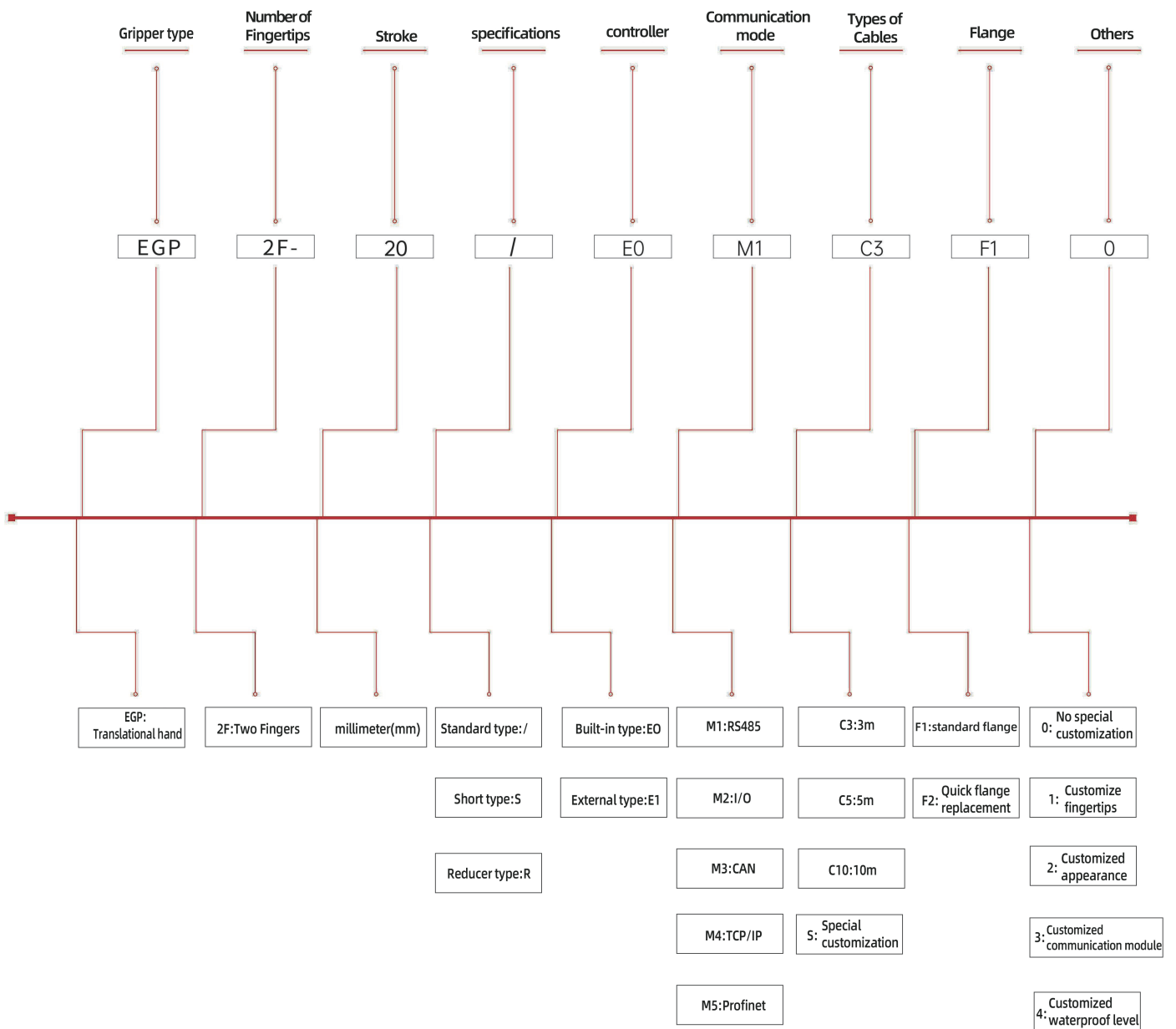
Professional team, timely technical support, comprehensive training system, ensures long-term stable operation of equipment.



# Introduction



## Model Definition Guidelines



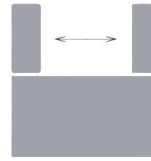
| Note: This is the default configuration option

## Series Selection

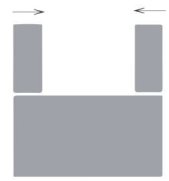
Gripping Force















Total Stroke



Gripping Speed



SKU NO.	Gripping Force Unit (N)	Max Payload Fit Unit (Kg)	Total Stroke Unit (mm)	Gripping Speed Unit (mm/s)	Communication Protocol
 EGP2F-8S	5	0.1	8	50	Modbus RTU(RS485)/IO
 EGP2F-14	24	0.5	14	50	Modbus RTU(RS485)/IO
 EGP2F-14S	18	0.35	14	50	Modbus RTU(RS485)/IO
 EGP2F-20	24	0.5	20	50	Modbus RTU(RS485)/IO
 EGP2F-20S	10	0.35	20	50	Modbus RTU(RS485)/IO
 EGP2F-26	35	0.7	26	100	Modbus RTU(RS485)/IO
 EGP2F-30	35	0.7	30	100	Modbus RTU(RS485)/IO
 EGP2F-40	100	1.5	40	30	Modbus RTU(RS485)/IO
 EGP2F-40S	80	1.5	40	30	Modbus RTU(RS485)/IO
 EGP2F-60S	170	3.5	60	30	Modbus RTU(RS485)/IO
 EGP2F-120	250	5	120	100	Modbus RTU(RS485)/IO
 EGP2F-185	300-800	6-10	185	20-100	Modbus RTU(RS485)/IO

# 8S 2F Parallel Gripper Order No.:EGP2F-8S

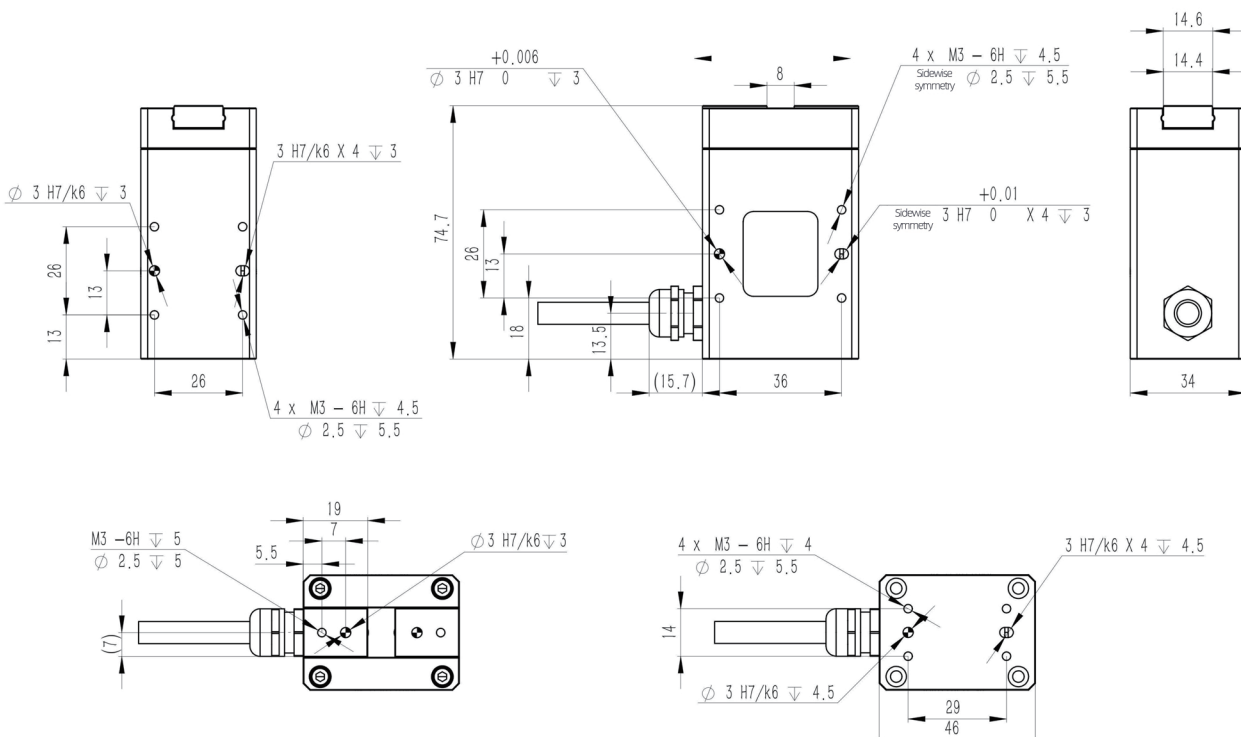
## ► Gripper Parameters



Product Name	8S 2F Parallel Gripper	Order No.	EGP2F-8S
Driving Mode	Servo Drive	Total Stroke	8 mm
Gripping Force	5 N	Max Payload	0.1 kg
Gripping Speed	50 mm/s		
Voltage	24 V	Repeatability	±0.02mm
Programmable Parameters		Position & Speed & Force	
Max Current	2 A	Weight	0.25 kg
Feedback Parameters		Position & Speed & Force	
Operating Condition	0~40°C、under 8 5%RH (without frosty)		
Communication Protocol	RS485、I/O(Can develop、CAN、TCP/IP、Ethercat、Profinet)		

- Driver & Controller Integrated
- High Life & Low Maintenance
- Precision Control
- Lightweight Design

## ► Gripper Dimensions



# 14 2F Parallel Gripper Order No.:EGP2F-14

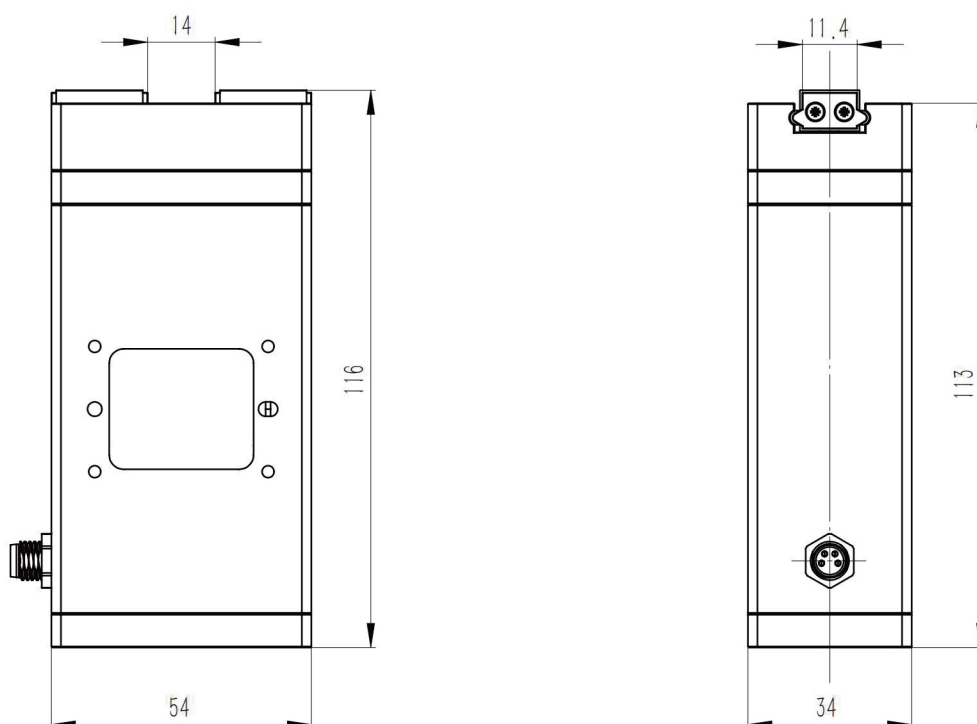
## ▶ Gripper Parameters



Product Name	14 2F Parallel Gripper	Order No.	EGP2F-14
Driving Mode	Servo Drive	Total Stroke	14 mm
Gripping Force	24 N	Max Payload	2 kg
Gripping Speed	100 mm/s		
Voltage	24 V	Repeatability	±0.02mm
Programmable Parameters		Position & Speed & Force	
Max Current	2 A	Weight	0.54 kg
Feedback Parameters		Position & Speed & Force	
Operating Condition	0~40°C, under 85%RH (without frosty)		
Communication Protocol	RS485, I/O(Can develop, CAN, TCP/IP, Ethercat, Profinet)		

- Driver & Controller Integrated
- High Life & Low Maintenance
- Precision Control
- Lightweight Design

## ▶ Gripper Dimensions



# 14S 2F Parallel Gripper Order No.:EGP2F-14S

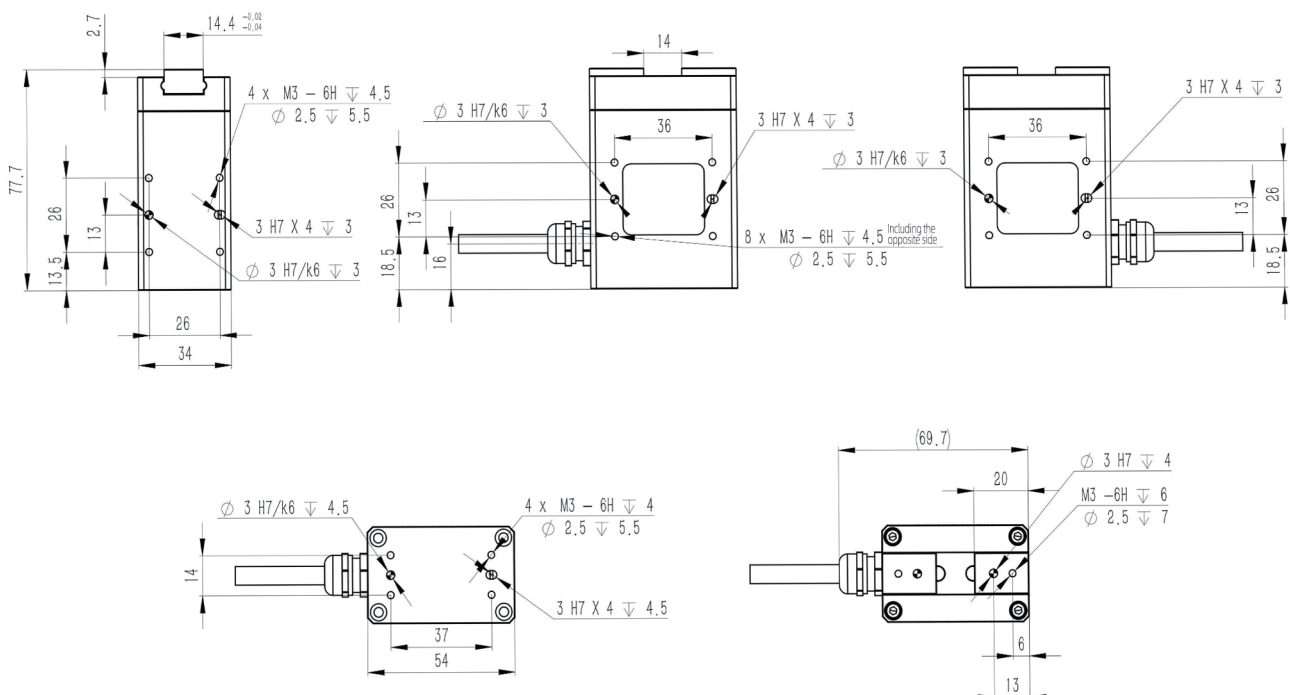
## ► Gripper Parameters



Product Name	14S 2F Parallel Gripper	Order No.	EGP2F-14S
Driving Mode	Servo Drive	Total Stroke	14 mm
Gripping Force	18 N	Max Payload	0.35 kg
Gripping Speed	50 mm/s		
Voltage	24 V	Repeatability	±0.02mm
Programmable Parameters		Position & Speed & Force	
Max Current	2 A	Weight	0.4 kg
Feedback Parameters		Position & Speed & Force	
Operating Condition	0~40°C, under 85%RH (without frosty)		
Communication Protocol	RS485, I/O(Can develop, CAN, TCP/IP, Ethercat, Profinet)		

- Driver & Controller Integrated
- High Life & Low Maintenance
- Precision Control
- Lightweight Design

## ► Gripper Dimensions



## 20 2F Parallel Gripper Order No.:EGP2F-20

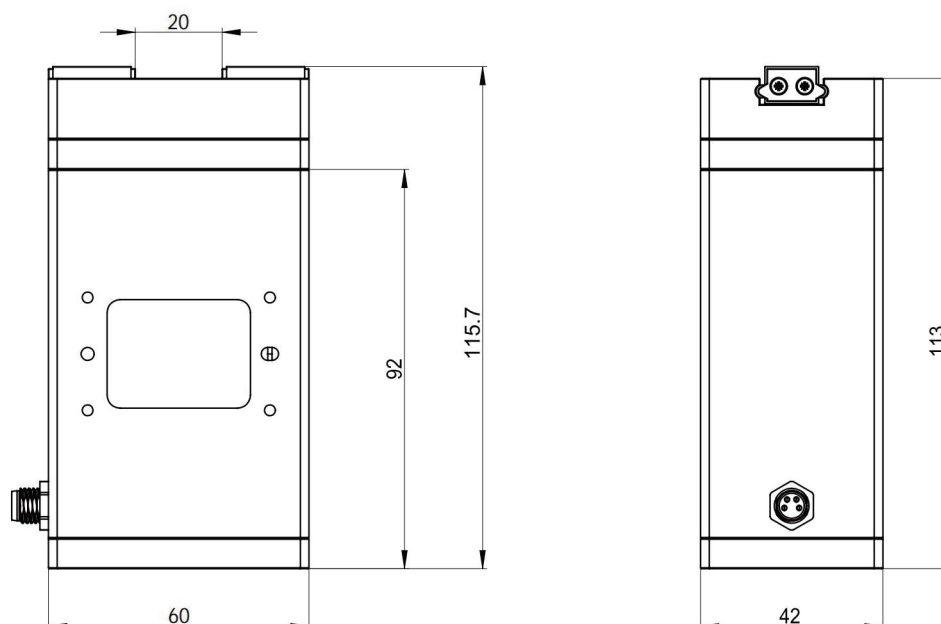
### ► Gripper Parameters



Product Name	20 2F Parallel Gripper	Order No.	EGP2F-20
Driving Mode	Servo Drive	Total Stroke	20 mm
Gripping Force	24 N	Max Payload	2 kg
Gripping Speed	100 mm/s		
Voltage	24 V	Repeatability	±0.02mm
Weight	0.74 kg	MaxCurrent	2 A
Programmable Parameters	Position & Speed & Force		
Feedback Parameters	Position & Speed & Force		
Operating Condition	0~40°C, under 85%RH (without frosty)		
Communication Protocol	RS485, I/O(Can develop, CAN, TCP/IP, Ethercat, Profinet)		

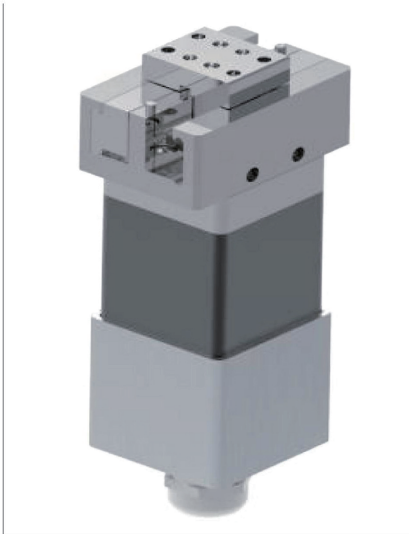
•Driver & Controller Integrated •High Life & Low Maintenance •Precision Control •Lightweight Design

### ► Gripper Dimensions



# 20S 2F Parallel Gripper Order No.:EGP2F-20S

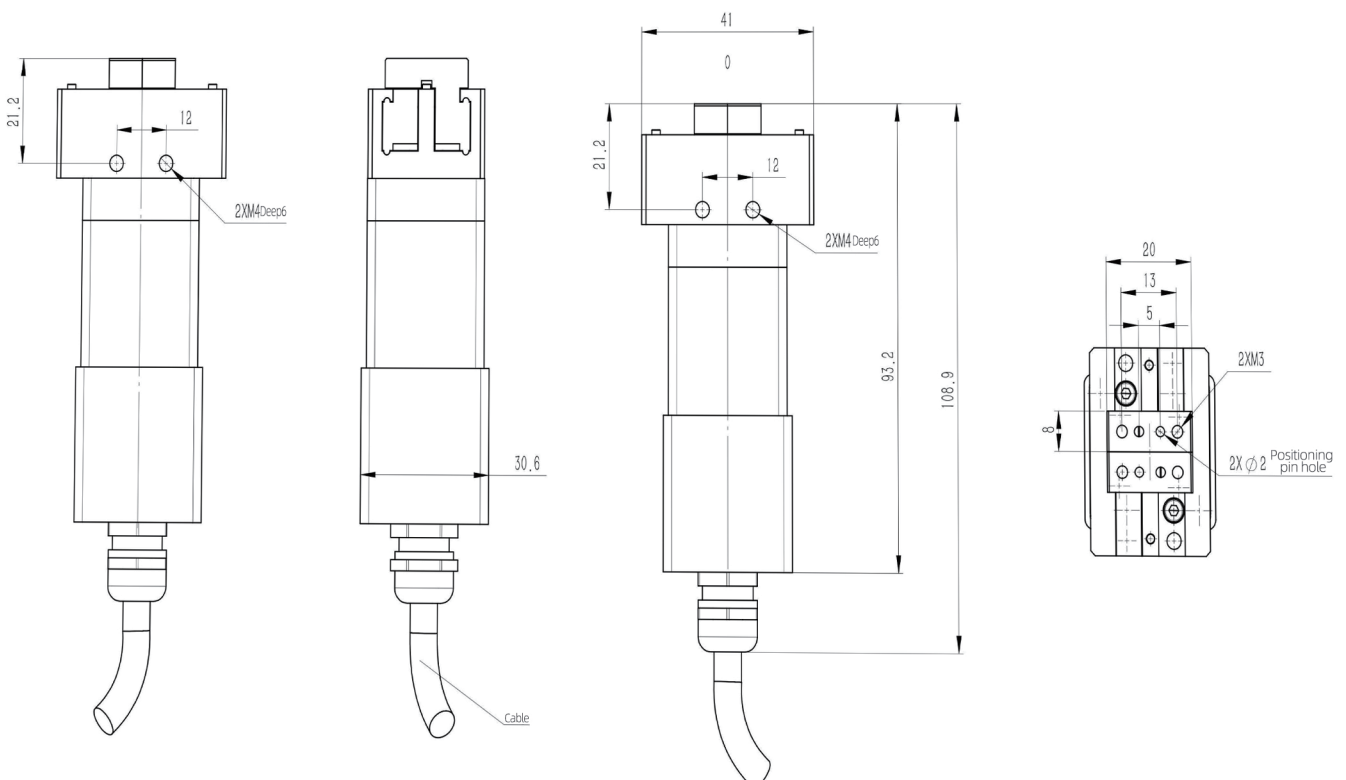
## ► Gripper Parameters



Product Name	20S 2F Parallel Gripper	Order No.	EGP2F-20S
Driving Mode	Servo Drive	Total Stroke	20 mm
Gripping Force	10 N	Max Payload	0.35 kg
Gripping Speed	50 mm/s		
Voltage	24 V	Repeatability	±0.02mm
Programmable Parameters	Position & Speed & Force		
Max Current	2 A	Weight	0.25 kg
Feedback Parameters	Position & Speed & Force		
Operating Condition	0~40°C, under 85%RH (without frosty)		
Communication Protocol	RS485, I/O(Can develop, CAN, TCP/IP, Ethercat, Profinet)		

- Driver & Controller Integrated
- High Life & Low Maintenance
- Precision Control
- Lightweight Design

## ► Gripper Dimensions



# 262F Parallel Gripper Order No.:EGP2F-26

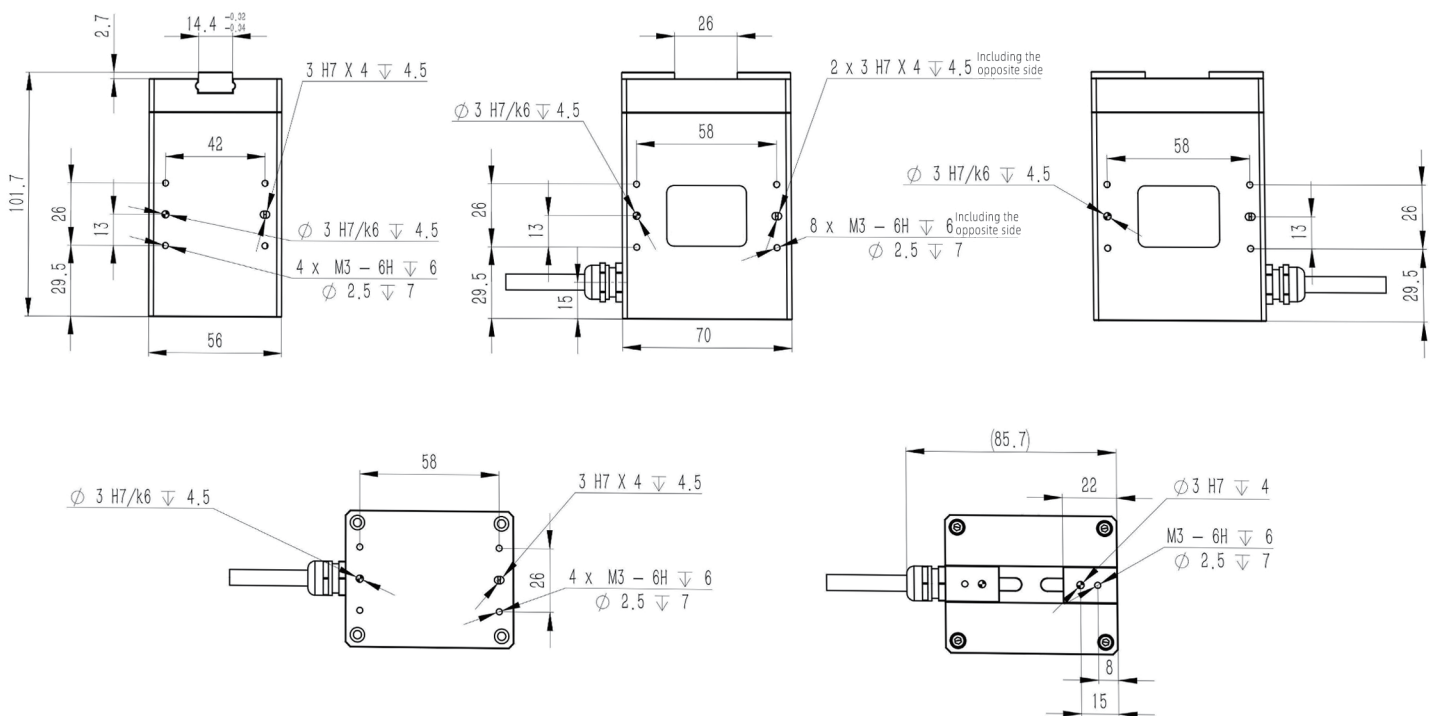
## ► Gripper Parameters



Product Name	26 2F Parallel Gripper	Order No.	EGP2F-26
Driving Mode	Servo Drive	Total Stroke	26 mm
Gripping Force	35 N	Max Payload	0.7 kg
Gripping Speed	100 mm/s		
Voltage	24 V	Repeatability	±0.02mm
Programmable Parameters		Position & Speed & Force	
Max Current	2 A	Weight	0.9 kg
Feedback Parameters		Position & Speed & Force	
Operating Condition	0~40°C, under 85%RH (without frosty)		
Communication Protocol	RS485、I/O(Can develop、CAN、TCP/IP、Ethercat、Profinet)		

- Driver & Controller Integrated
- High Life & Low Maintenance
- Precision Control
- Lightweight Design

## ► Gripper Dimensions



# 30 2F Parallel Gripper Order No.:EGP2F-30

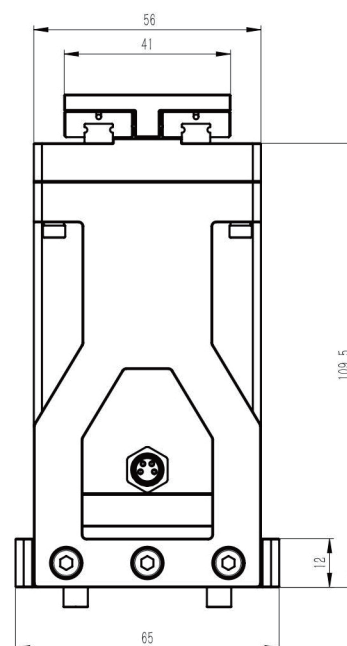
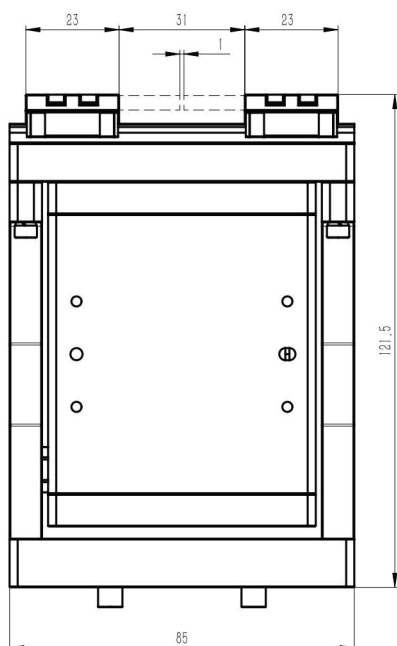
## ▶ Gripper Parameters



Product Name	30 2F Parallel Gripper	Order No.	EGP2F-30
Driving Mode	Servo Drive	Total Stroke	30 mm
Moment Limitation	MR:11.8 N.m, MP:7.4 N.m, MY:7.4 N.m,		
Gripping Force	45 N	Gripping Speed	150 mm/s
Max Payload	4 kg		
Repeatability	0.05 mm	Voltage	24 V
Max Current	2 A	Weight	1.09 kg
Programmable Parameters	Position & Speed & Force		
Feedback Parameters	Position & Speed & Force		
Operating Condition	0~40°C、under 85%RH (without frosty)		
Communication Protocol	RS485、I/O(Can develop、CAN、TCP/IP、Ethercat、Profinet)		

- Driver & Controller Integrated
- High Life & Low Maintenance
- Precision Control
- Flexible layout

## ▶ Gripper Dimensions



## 40 2F Parallel Gripper Order No.:EGP2F-40

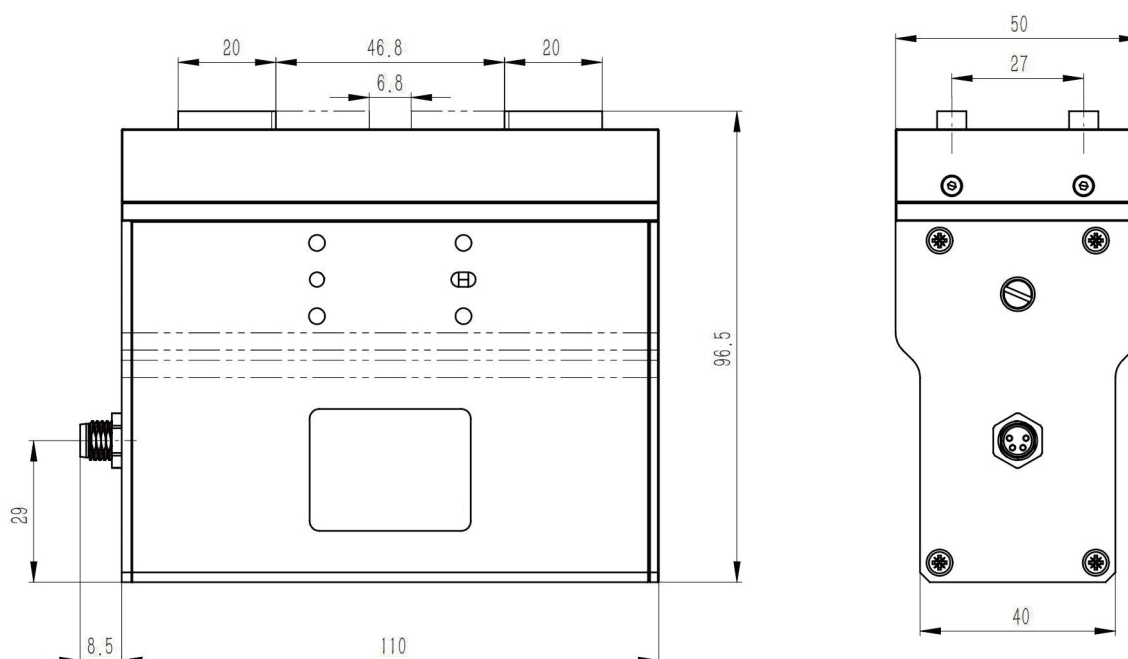
### ► Gripper Parameters



Product Name	40 2F Parallel Gripper	Order No.	EGP2F-40
Driving Mode	Servo Drive	Total Stroke	40 mm
Moment Limitation	MR:15.8 Nm, MP:9.6 Nm, MY:9.6 Nm		
Gripping Force	100N	MaxPayload	6 kg
Gripping Speed	30 mm/s		
Repeatability	0.05 mm	Voltage	24V
Max Current	2 A	Weight	1.2 kg
Programmable Parameters	Position & Speed & Force		
Feedback Parameters	Position & Speed & Force		
Operating Condition	0~40°C、under 85%RH (without frosty)		
Communication Protocol	RS485、I/O(Can develop、CAN、TCP/IP、Ethercat、Profinet)		

•Self-lock •Driver & Controller Integrated •Compact Size •Precision Control •High Gripping Force

### ► Gripper Dimensions



# 40S 2F Parallel Gripper Order No.:EGP2F-40S

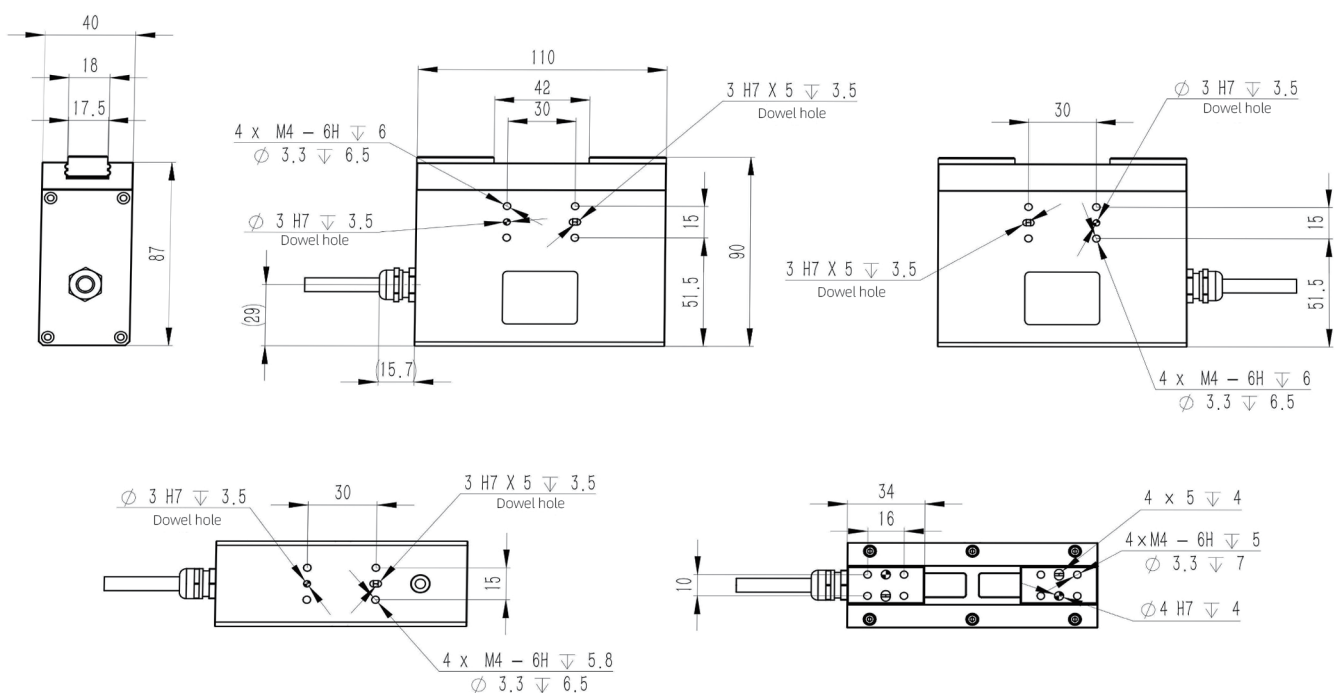
## ► Gripper Parameters



Product Name	40S 2F Parallel Gripper	Order No.	EGP2F-40S
Driving Mode	Servo Drive	Total Stroke	40 mm
Moment Limitation	MR: 60 N.m, MP: 30 N.m, MY: 40 N.m,		
Gripping Force	80 N	Gripping Speed	30 mm/s
Max Payload	1.5 kg		
Repeatability	±0.02 mm	Voltage	24 V
Max Current	2 A	Weight	1.2 kg
Programmable Parameters	Position & Speed & Force		
Feedback Parameters	Position & Speed & Force		
Operating Condition	0~40°C、under 85%RH (without frosty)		
Communication Protocol	RS485、I/O(Can develop、CAN、TCP/IP、Ethercat、Profinet)		

- Driver & Controller Integrated
- High Life & Low Maintenance
- Precision Control
- Flexible layout

## ► Gripper Dimensions



# 60S 2F Parallel Gripper Order No.:EGP2F-60S

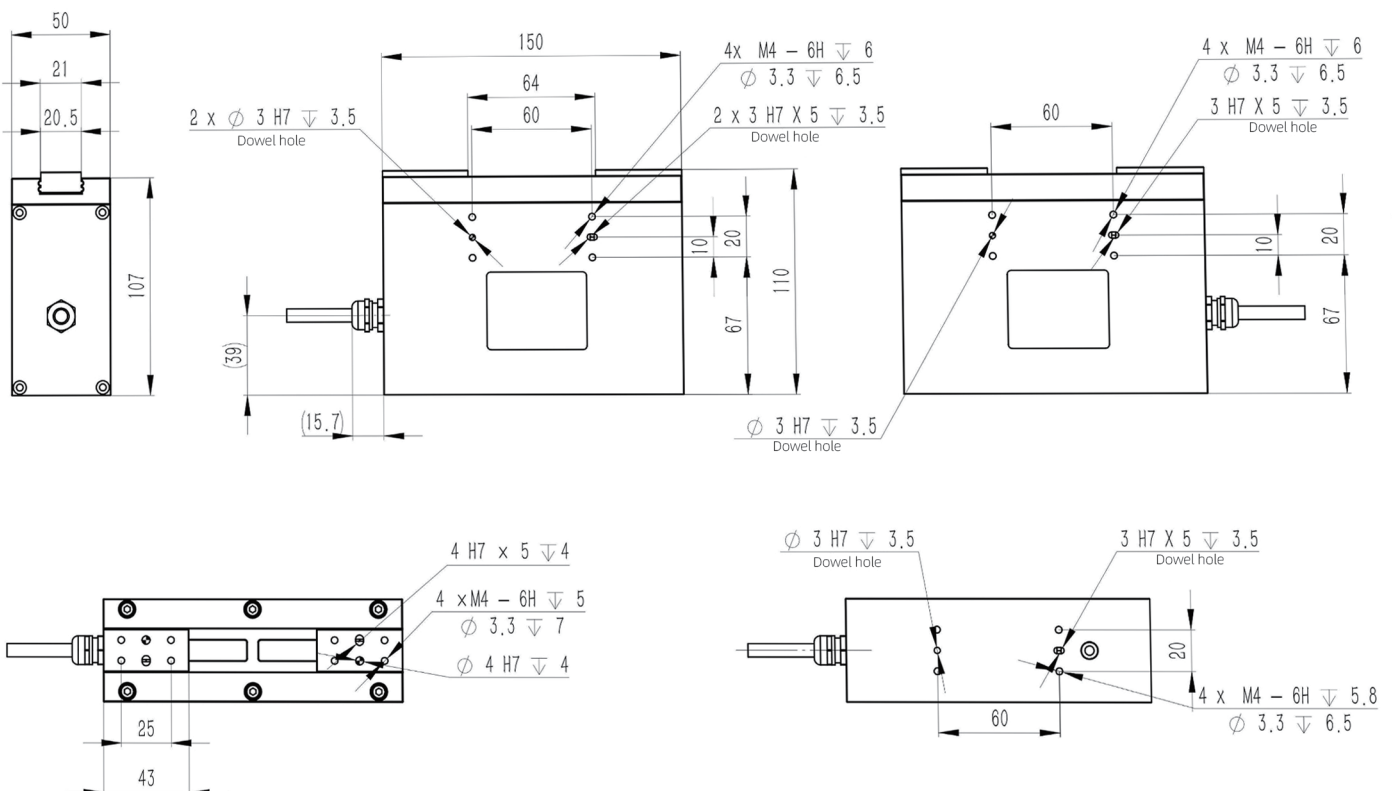
## ► Gripper Parameters



Product Name	60S 2F Parallel Gripper	Order No.	EGP2F-60S
Driving Mode	Servo Drive	Total Stroke	60 mm
Moment Limitation	MR: 60 N.m, MP: 30 N.m, MY: 40 N.m,		
Gripping Force	170 N	Gripping Speed	30 mm/s
Max Payload	3.5 kg		
Repeatability	±0.02 mm	Voltage	24V
Max Current	2 A	Weight	2.2 kg
Programmable Parameters	Position & Speed & Force		
Feedback Parameters	Position & Speed & Force		
Operating Condition	0~40°C、under 85%RH (without frosty)		
Communication Protocol	RS485、I/O(Can develop、CAN、TCP/IP、Ethercat、Profinet)		

- Driver & Controller Integrated
- High Life & Low Maintenance
- Precision Control
- Flexible layout

## ► Gripper Dimensions



# 120 2F Parallel Gripper Order No.:EGP2F-120

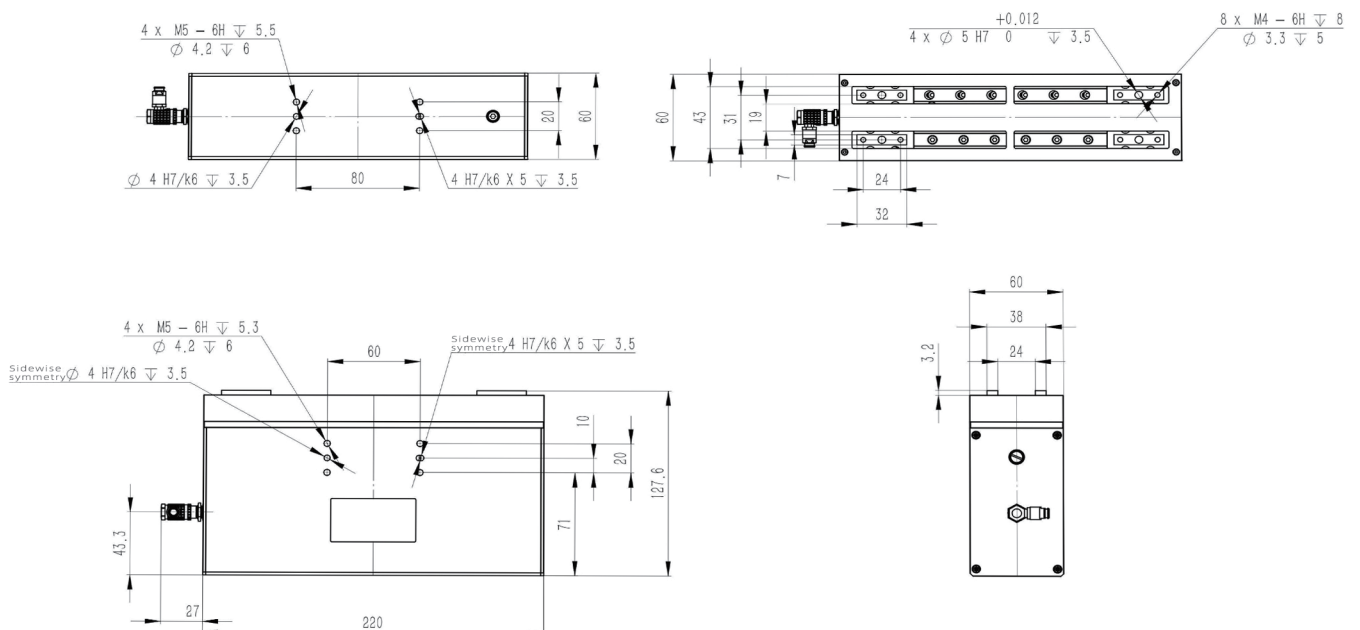
## ► Gripper Parameters



Product Name	120 2F Parallel Gripper	Order No.	EGP2F-120
Driving Mode	Servo Drive	Total Stroke	120 mm
Moment Limitation	MR: 60 N.m, MP: 30 N.m, MY: 40 N.m,		
Gripping Force	250 N	Gripping Speed	100 mm/s
Max Payload	5 kg		
Repeatability	±0.02 mm	Voltage	24 V
Max Current	2 A	Weight	2.8 kg
Programmable Parameters	Position & Speed & Force		
Feedback Parameters	Position & Speed & Force		
Operating Condition	0~40°C, under 85%RH (without frosty)		
Communication Protocol	RS485、I/O(Can develop、CAN、TCP/IP、Ethercat、Profinet)		

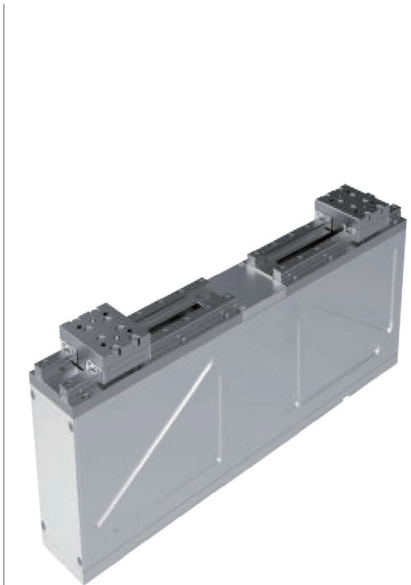
- Driver & Controller Integrated
- High Life & Low Maintenance
- Precision Control
- Flexible layout

## ► Gripper Dimensions



# 185 2F Parallel Gripper Order No.:EGP2F-185

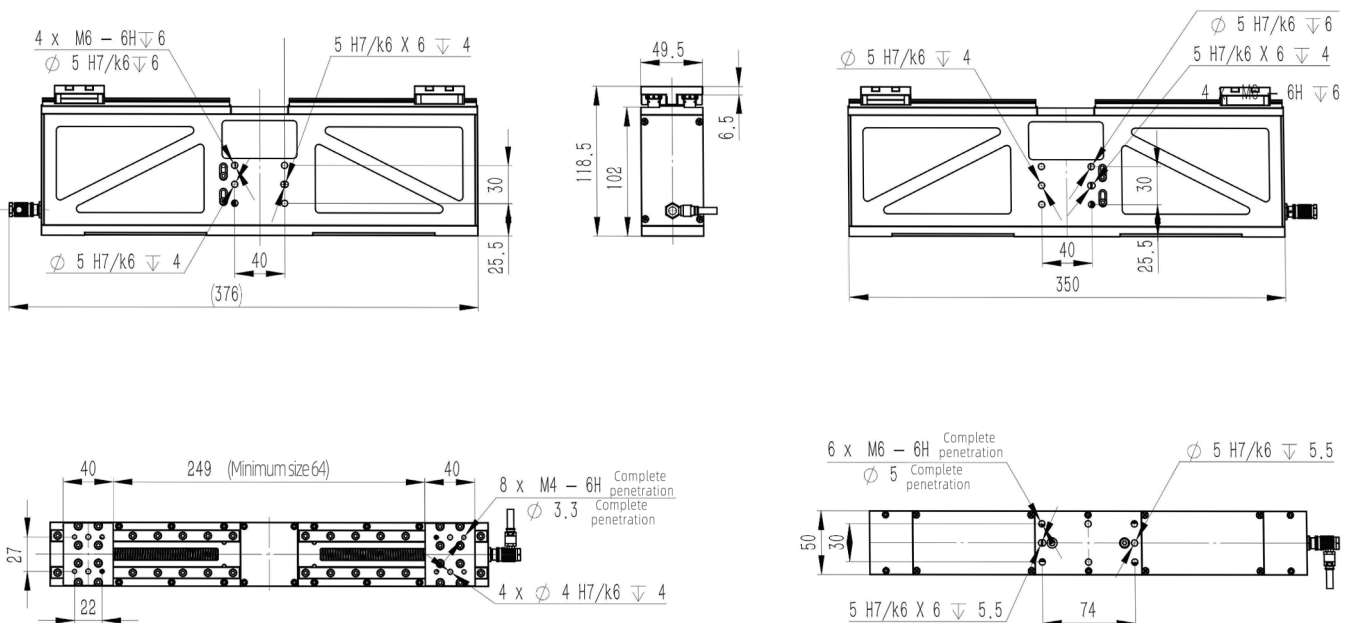
## ► Gripper Parameters



Product Name	185 2F Parallel Gripper	Order No.	EGP2F-185
Driving Mode	Servo Drive	Total Stroke	185 mm/s
Moment Limitation	MR: 60 N.m, MP: 30 N.m, MY: 40 N.m,		
Gripping Force	300-800N	Gripping Speed	20-100 mm/s
Max Payload	6-10kg		
Repeatability	±0.02 mm	Voltage	24 V
Max Current	2 A	Weight	3.5 kg
Programmable Parameters	Position & Speed & Force		
Feedback Parameters	Position & Speed & Force		
Operating Condition	0~40°C、under 85%RH (without frosty)		
Communication Protocol	RS485、I/O(Can develop、CAN、TCP/IP、Ethercat、Profinet)		

- Driver & Controller Integrated
- High Life & Low Maintenance
- Precision Control
- Flexible layout

## ► Gripper Dimensions



## **LIMON in P.R.China**

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English Website

## **LIMON AUTO TECH CO., LTD.**

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