

# DH-ROBOTICS

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Servo-Electric Grippers



[en.dh-robotics.com](http://en.dh-robotics.com)



# DH-ROBOTICS

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DH-Robotics Technology Co.,Ltd., dedicated in developing and providing electric gripping products/solutions for robots and automation equipments.

The company specializes in the development and application of multiple gripping technologies, aiming to improve the grasping versatility and capability of robots/equipments used in different scenarios. DH-Robotics offers a series of compact, robust and easy-to-use electric grippers with innovative design, precise control and gripping feedbacks, to better facilitate industrial applications, increase the productivity and automate your grasping process in a better way.



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### **Servo rotating grippers**

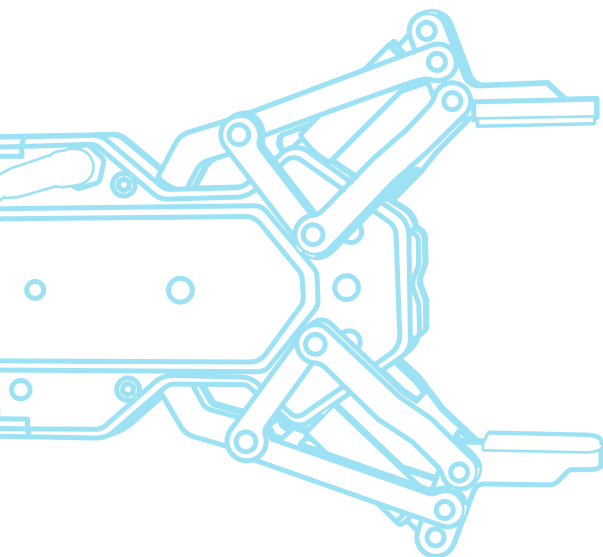
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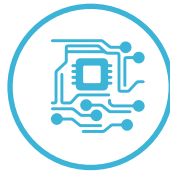
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# Application scenarios



Electronics handling

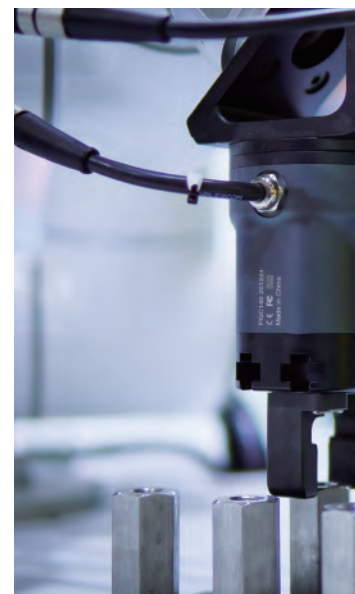


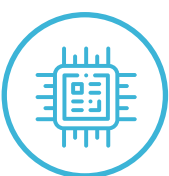
Laboratory automation



New Energy

Widely used in industrial fields

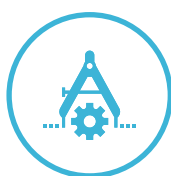




semiconductor



Car Parts



Precision Assembly



Packaging



New Retailing



教育科研





## PGE/CGE Series

Slim-type parallel grippers

### Application Fields

Electronics, medical and laboratory automation, auto parts, new energy, semiconductors, home appliances and other industries, for various applications of small and medium-sized parts assembly, sorting, pick and place.

### Features

#### Integrated design

The drive controller and communication are integrated inside the gripper, and can be used without external controller.

#### Precise force control

With the special transmission design and driving algorithm compensation, the PGE is able to adjust the force continuously and achieve the force repeatability of 0.1N.

#### Small size

With compact structure and flexible installation, the PGE is able to save the design space

#### Intelligent feedback

The PGE series is easy to monitor the gripping process according to the functions such as grasping status detection, real-time position detection and drop detection.

#### Adjustable parameters

The PGE series is able to meet the requirements from different applications with the adjustable of the gripping position, force, and speed.

PGE — Parallel Gripper Electronics  
CGE — Centric Gripper Electronics

## PGI/CGI Series

Slim-type parallel grippers

### Application Fields

mechanical processing, electronics, auto parts, new energy, home appliances, packaging and other industries, for the pick & place and assembly of medium-sized parts

### Features

#### Integrated design

The drive controller and communication are integrated inside the gripper, and can be used without external controller.

#### Self-locking

The PGI series is able to maintain the gripping of the workpiece when the power is off, and improve the safety of the gripping process

#### Long stroke and adjustable gripping force

With 80mm stroke, the PGI-140 is compatible to grip objects with different size

#### High protection level

The PGI series is designed for harsh environment

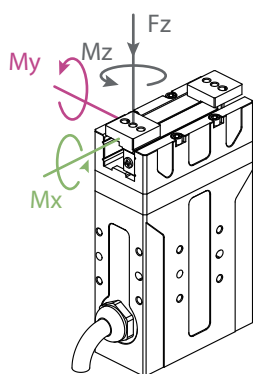
#### Intelligent feedback

The PGE series is easy to monitor the gripping process according to the functions such as grasping status detection, real-time position detection and drop detection.

PGI — Parallel Gripper Industrial  
CGI — Centric Gripper Industrial

# PGE-5

Slim-type parallel grippers



Allowable vertical load (static)

Fz: 50 N

Allowable vertical load (static)

Mx: 0.3 N · m

My: 0.25 N · m

Mz: 0.3 N · m

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Gripping force(per jaw)

0.8~5 N

Opening/closing stroke(both sides)

26 mm

## Mechanical specifications

Maximum recommended load\* 0.05 kg

Force repeatability  $\pm 0.3$  N

Position repeatability (both sides)  $\pm 0.02$  mm

Opening/closing time 0.2 s/0.2 s

Driving method Rack and pinion + Cross roller guidance

Weight 0.4 kg

Noise emission < 40 dB

## Electrical specifications

Communication Standard: Modbus RTU (RS485), Digital I/O interface Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

Nominal voltage 24 V DC  $\pm 10\%$

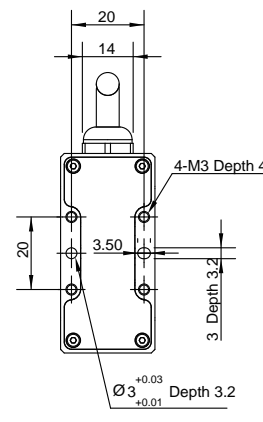
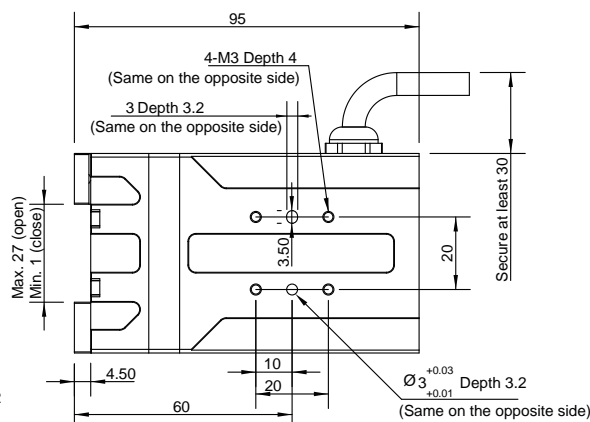
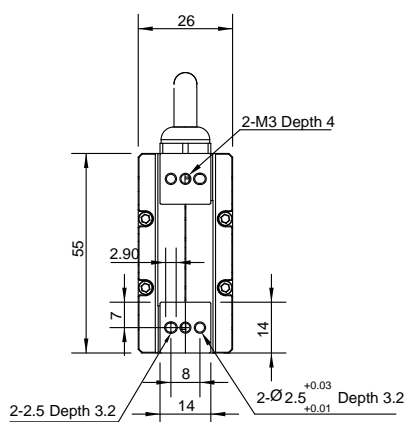
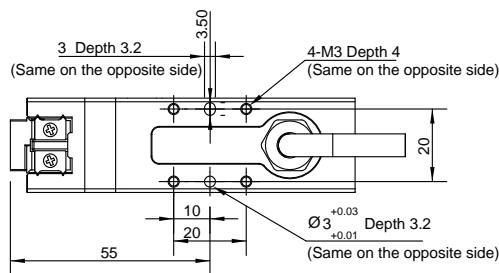
Nominal current 0.35 A

Peak current 0.6 A

Ingress protection rating IP 40

Recommended operating environment 0~40°C, 85% RH under environment

\*It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please consult us.



# PGE-8

Slim-type parallel grippers

DH-ROBOTICS

Gripping force(per jaw)

2~8 N

Opening/closing stroke(both sides)

14 mm

## Mechanical specifications

Maximum recommended load*	0.1 kg
Force repeatability	± 0.3 N
Position repeatability (both sides)	± 0.02 mm
Opening/closing time	0.2 s/0.2 s
Driving method	Rack and pinion + Cross roller guidance
Weight	0.4 kg
Noise emission	< 40 dB

## Electrical specifications

**Communication interface** Standard: Modbus RTU (RS485), Digital I/O  
Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

**Nominal voltage** 24 V DC ± 10%

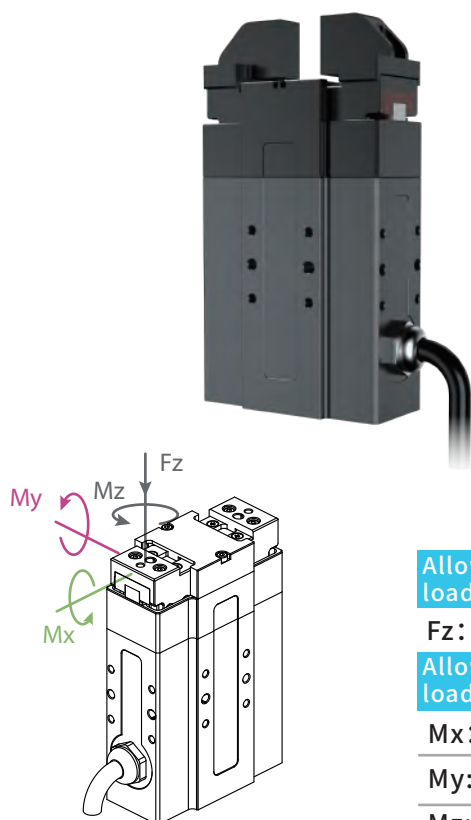
**Nominal current** 0.4 A

**Peak current** 0.7 A

**Ingress protection rating** IP 40

**Recommended operating environment** 0~40°C, 85% RH under environment

\*It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please consult us.



Allowable vertical load (static)

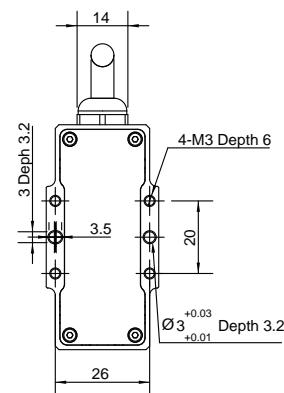
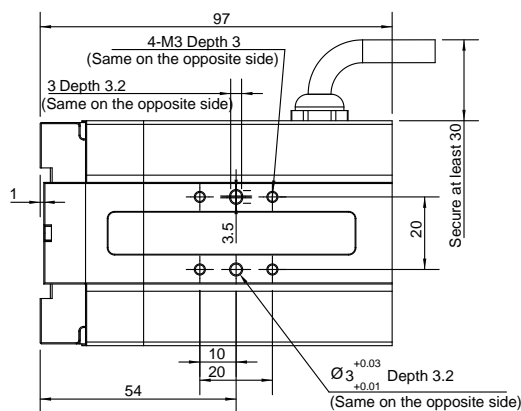
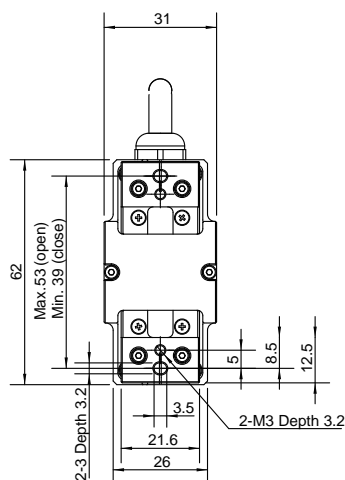
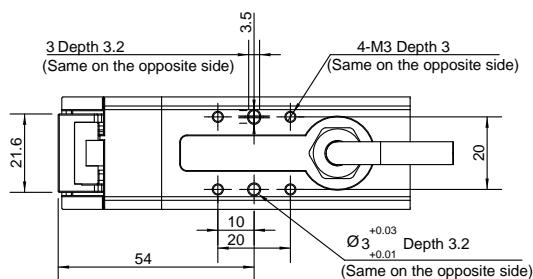
Fz: 90 N

Allowable vertical load (static)

Mx: 0.55 N · m

My: 0.45 N · m

Mz: 0.55 N · m





# PGE-15

Slim-type parallel grippers

DH-ROBOTICS

Gripping force(per jaw)

Opening/closing stroke(both sides)

6~15 N

26 mm

## Mechanical specifications

Maximum recommended load*	0.25 kg
Position repeatability (both sides)	± 0.02 mm
Opening/closing time	0.5 s/0.5 s
Driving method	Rack and pinion + Cross roller guidance
Weight	0.4 kg
Noise emission	< 40 dB

## Electrical specifications

**Communication interface** Standard: Modbus RTU (RS485), Digital I/O  
Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

**Nominal voltage** 24 V DC ± 10%

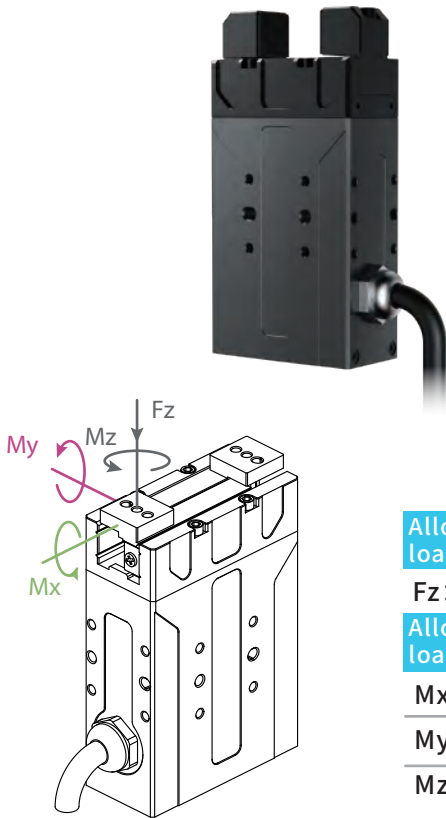
**Nominal current** 0.25 A

**Peak current** 0.5 A

**Ingress protection rating** IP 40

**Recommended operating environment** 0~40°C, 85% RH under environment

\*It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please consult us.



Allowable vertical load (static)

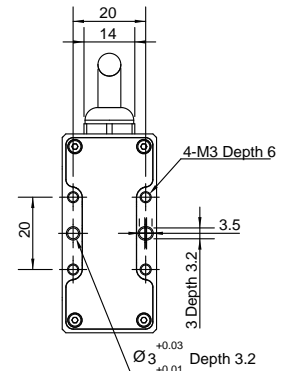
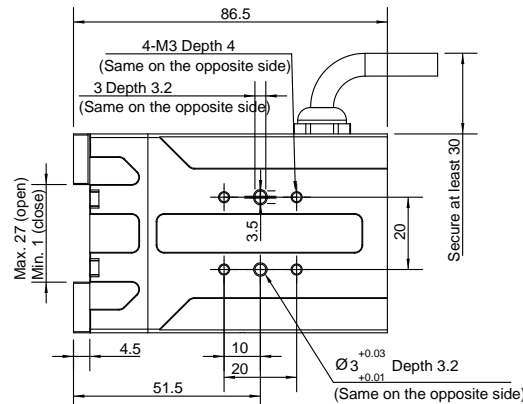
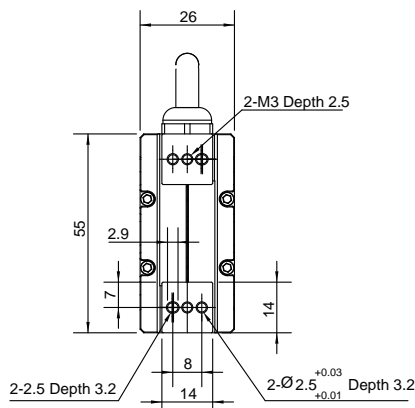
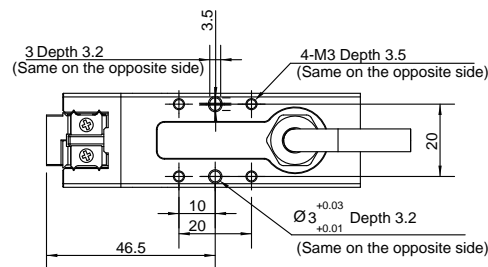
Fz: 70 N

Allowable vertical load (static)

Mx: 0.9 N · m

My: 0.75 N · m

Mz: 0.9 N · m



# PGE-50

Slim-type parallel grippers

DH-ROBOTICS

Gripping force(per jaw)

15~50 N

Opening/closing stroke(both sides)

26 mm

## Mechanical specifications

Maximum recommended load*	1 kg
Position repeatability (both sides)	± 0.02 mm
Opening/closing time	0.3 s/0.3 s
Driving method	Rack and pinion + Cross roller guidance
Weight	0.4 kg
Noise emission	< 40 dB

## Electrical specifications

**Communication interface** Standard: Modbus RTU (RS485), Digital I/O  
Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

Nominal voltage 24 V DC ± 10%

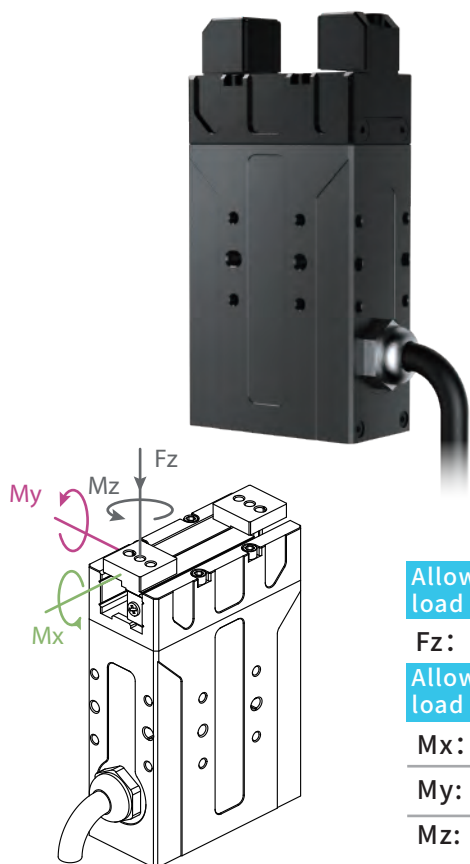
Nominal current 0.25 A

Peak current 0.5 A

Ingress protection rating IP 40

Recommended operating environment 0~40°C, 85% RH under environment

\*It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please consult us.



Allowable vertical load (static)

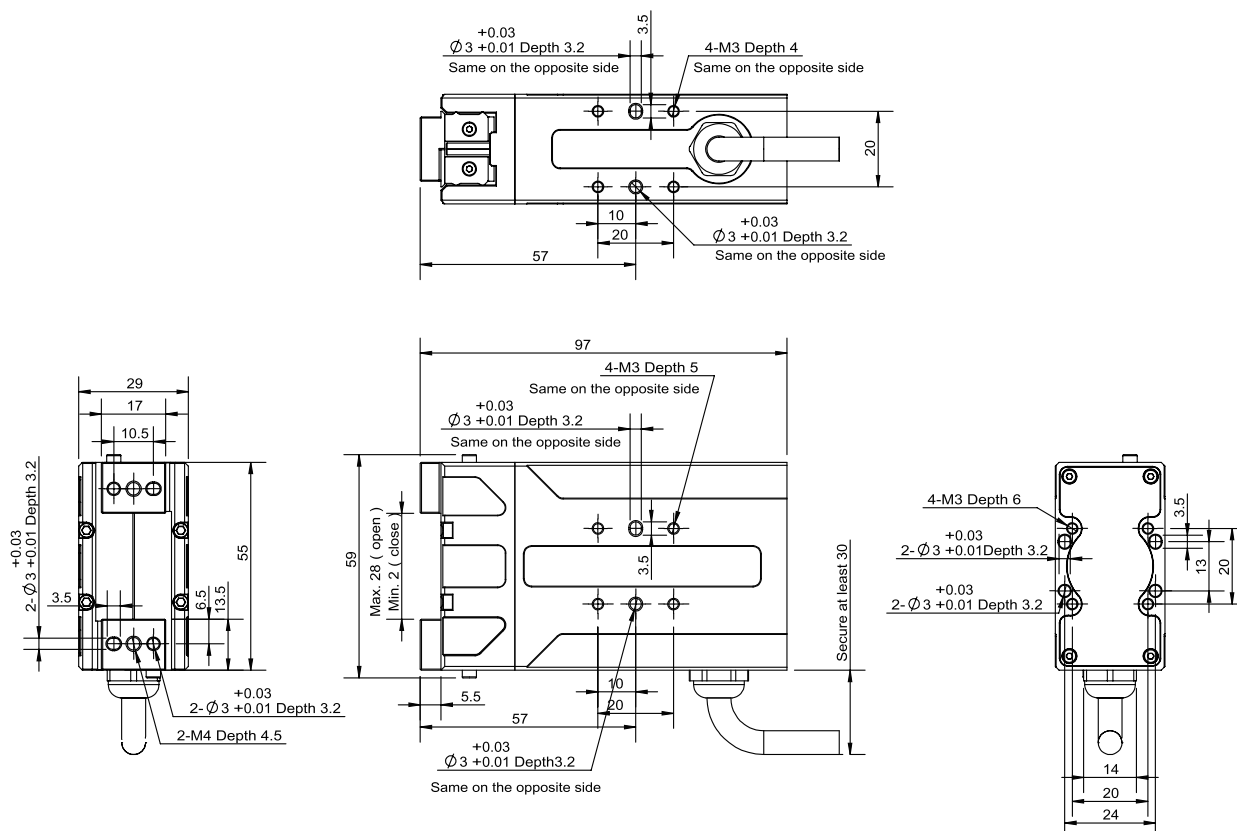
Fz: 150 N

Allowable vertical load (static)

Mx: 2.5 N · m

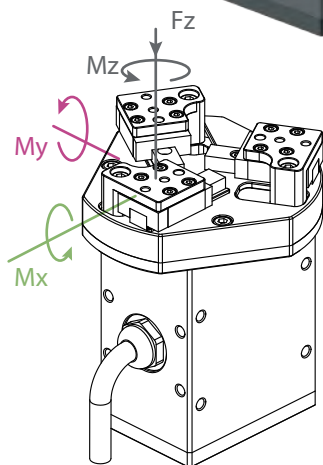
My: 2 N · m

Mz: 3 N · m



# CGE-10

Slim-type parallel grippers



Allowable vertical load (static)

Fz: 150 N

Allowable vertical load (static)

Mx: 0.62 N · m

My: 0.62 N · m

Mz: 0.62 N · m

DH-ROBOTICS

Gripping force(per jaw)

3~10 N

Opening/closing stroke(both sides)

10 mm

## Mechanical specifications

Maximum recommended load\* 0.1 kg

Position repeatability (both sides)  $\pm 0.03$  mm

Opening/closing time 0.3 s/0.3 s

Driving method 齿轮齿条+直线导轨

Weight 0.43 kg

Noise emission < 40 dB

## Electrical specifications

Communication Standard: Modbus RTU (RS485), Digital I/O interface Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

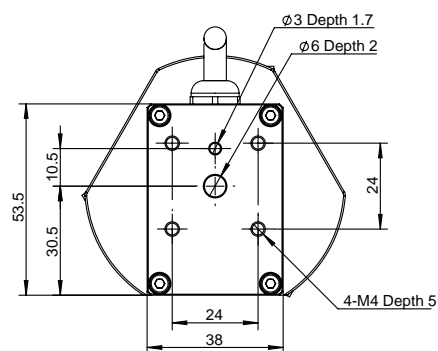
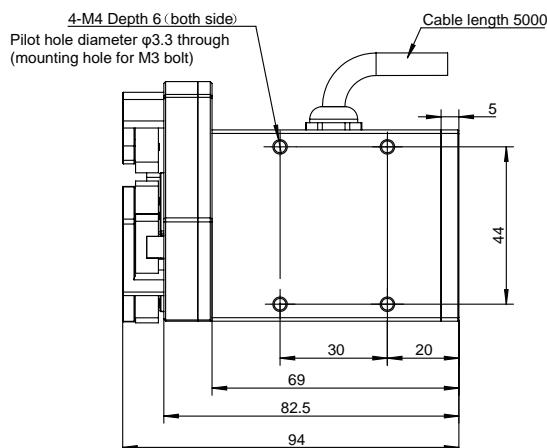
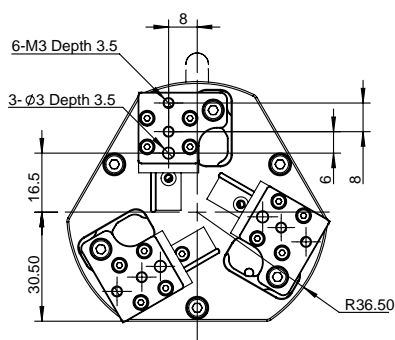
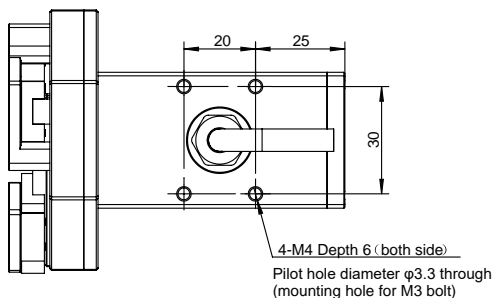
Nominal voltage 24 V DC  $\pm 10\%$

Nominal current 0.3 A

Peak current 0.6 A

Recommended operating environment 0~40°C, 85% RH under environment

\*It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please consult us.





# PGS-5

## Miniature electromagnet grippers

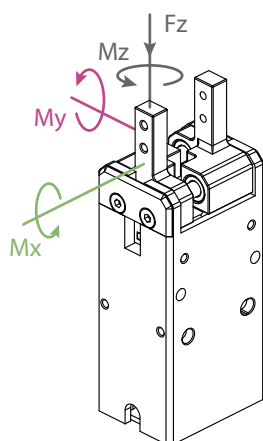
DH-ROBOTICS

Gripping force(per jaw)

Opening/closing stroke(both sides)

3.5~5 N

5 mm



Allowable vertical load (static)

Fz: 150 N

Allowable vertical load (static)

Mx: 0.62 N·m

My: 0.62 N·m

Mz: 0.62 N·m

### Mechanical specifications

Maximum recommended load\* 0.05 kg

Position repeatability (both sides)  $\pm 0.01$  mm

Opening/closing time 0.03 s/0.03 s

Driving method 电磁铁+弹簧

Weight 0.2 kg

Noise emission < 50 dB

### Electrical specifications

Communication interface Digital I/O

Nominal voltage 24 V DC  $\pm 10\%$

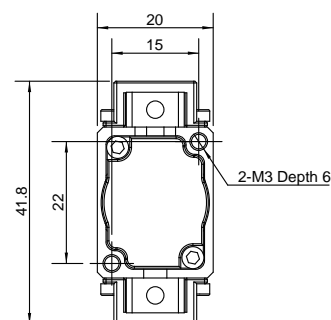
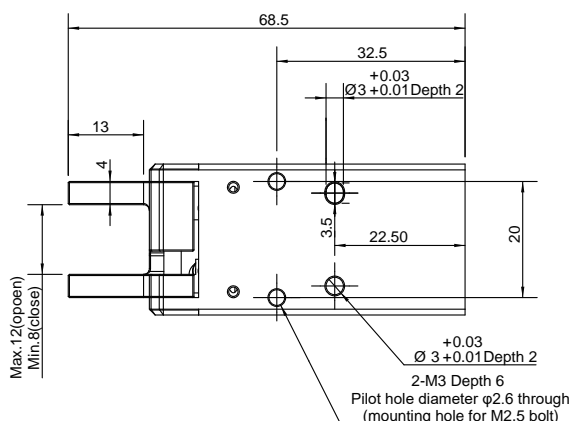
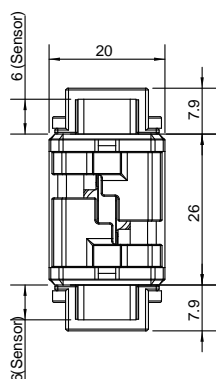
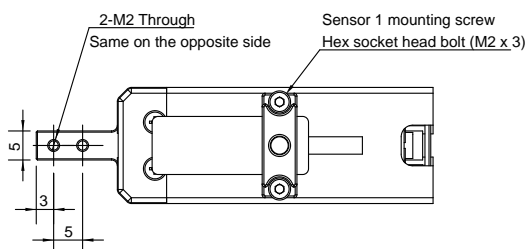
Nominal current 0.1 A

Peak current 3 A

Ingress protection rating IP 40

Recommended operating environment 0~40°C, 85% RH under environment

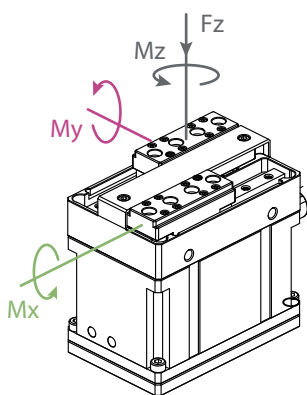
\*It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please consult us.



# PGI-140

Slim-type parallel grippers

DH-ROBOTICS



Allowable vertical load (static)

Fz: 300 N

Allowable vertical load (static)

Mx: 7 N·m

My: 7 N·m

Mz: 7 N·m

Gripping force(per jaw)

40~140 N

Opening/closing stroke(both sides)

80 mm

Mechanical specifications

Maximum recommended load\* 3 kg

Position repeatability (both sides)  $\pm 0.03$  mm

Opening/closing time 0.7 s/0.7 s

Driving method 齿轮齿条+直线导轨

Weight 1 kg (不含手指)

Noise emission < 50 dB

Electrical specifications

Communication Standard: Modbus RTU (RS485), Digital I/O interface Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

Nominal voltage 24 V DC  $\pm 10\%$

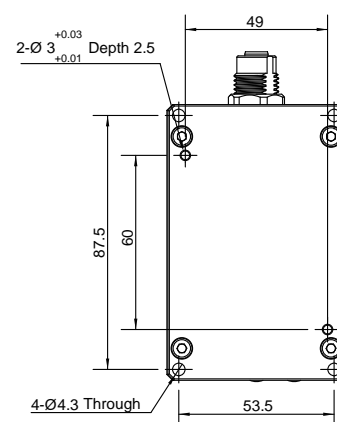
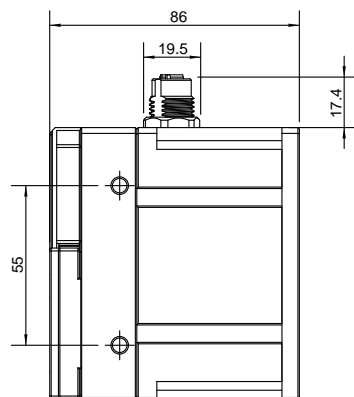
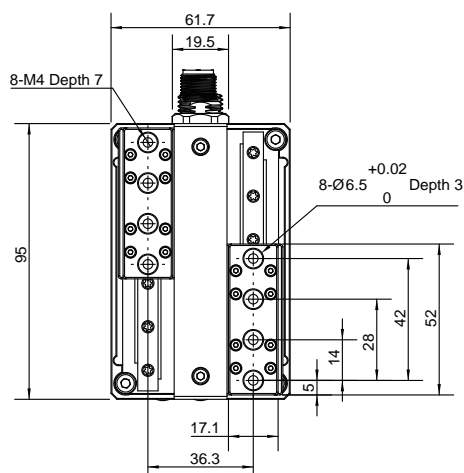
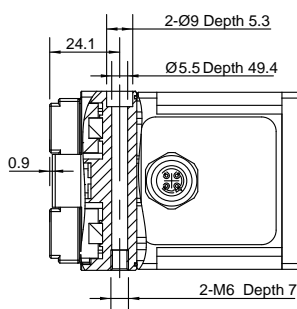
Nominal current 0.5 A

Peak current 1.2 A

Ingress protection rating IP 54

Recommended operating environment 0~40°C, 85% RH under environment

\*取决于抓取物体形状、接触面材料与摩擦力以及运动加速度等因素，抓取物体的重心偏移也会影响到负载，如有问题请咨询我们。



# CGI-100

Slim-type parallel grippers

DH-ROBOTICS



This type of gripper is recommended to use the standard finger. If you need to replace it in the application, please contact us for confirmation.

■ 抓持力(单侧)

■ 推荐夹持直径(向内夹持)

**30~100 N  $\phi$ 40~ $\phi$ 170 mm**

## ■ Mechanical specifications

Maximum recommended load*	1.5 kg
Position repeatability (both sides)	$\pm 0.03$ mm
Opening/closing time	0.5 s/0.5 s
Driving method	Gear
Weight	1.5 kg
Noise emission	< 50 dB

## ■ Electrical specifications

**Communication interface** Standard: Modbus RTU (RS485), Digital I/O  
Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

Nominal voltage 24 V DC  $\pm 10\%$

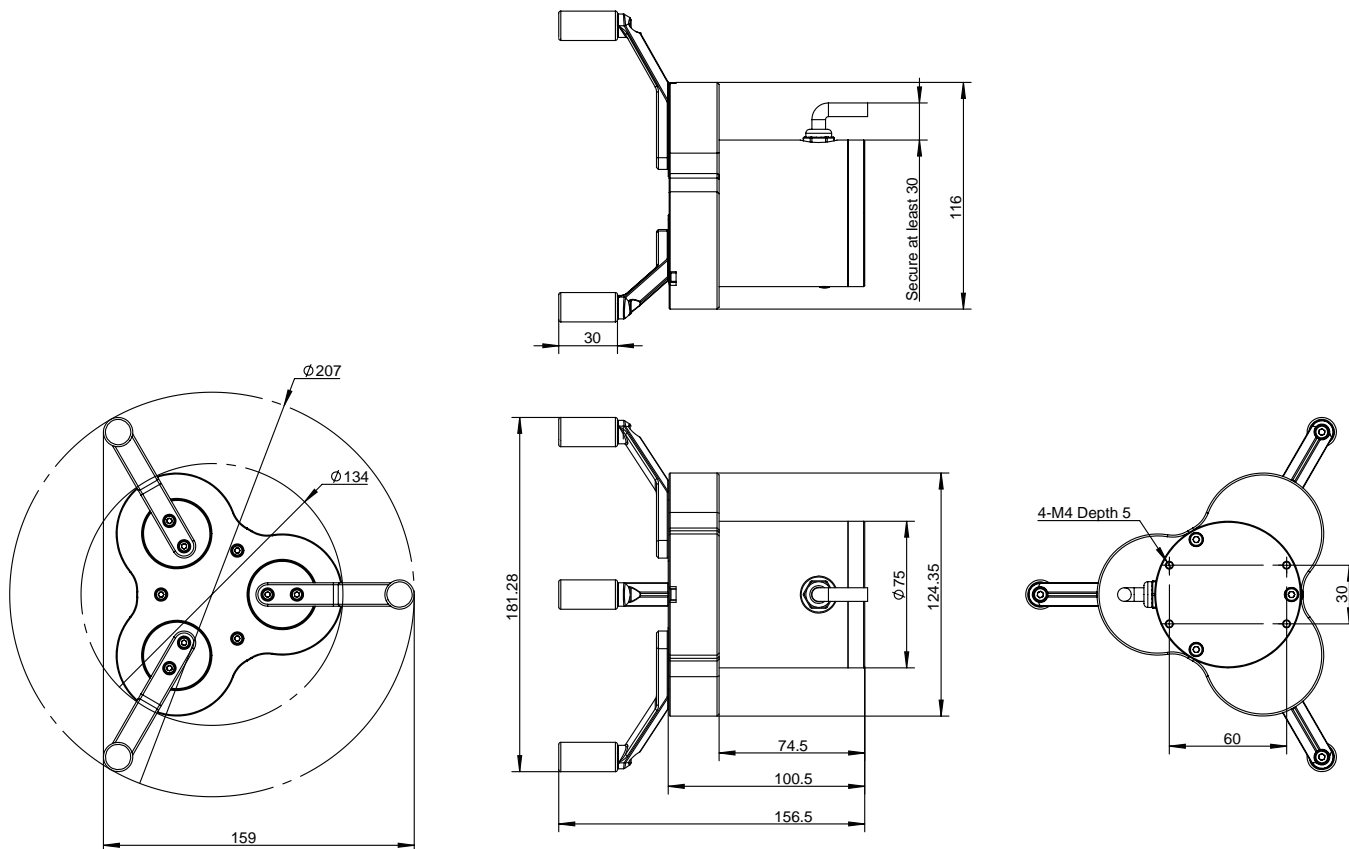
Nominal current 0.4 A

Peak current 1 A

Ingress protection rating IP 40

**Recommended operating environment** 0~40°C, 85% RH under environment

\*取决于抓取物体形状、接触面材料与摩擦力以及运动加速度等因素，抓取物体的重心偏移也会影响到负载，如有问题请咨询我们。





# RGI Series

## Servo rotating grippers

### Application field

test tube opening and closing, parts assembly, widely used in medical and laboratory automation, electronics, home appliances, packaging, auto parts and other industries

### Features

#### Gripping and infinite rotation

with the unique structural design, the RGI series is able to achieve the independent movement of gripping and infinite rotation, which is solving the non-standard design of the equipment and the winding problem of infinite rotation. It is stable and easy to use.

#### Adjustable parameters

The RGI series is able to adjust the gripping force, position, speed as well as the rotation parameters like torque, totation and angle.

#### Integrated design

with 50\*50mm size, the RGI-14 is integrated with 2 sets of servo systems and the drive controller.

#### Easy deployment

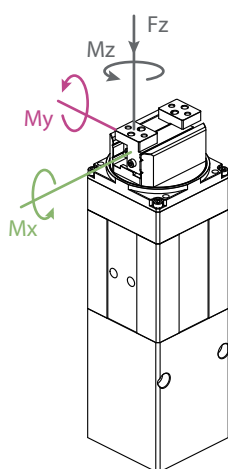
The RGI series use the standardized communication and command interfaces which is easy to work with equipment.

#### Intelligent feedback

The RGI series is easy to monitor the gripping and rotation process with the intelligent feedback of gripping & rotation status and drop detection

# RGI-14

Servo rotating grippers



Allowable vertical load (static)

Fz: 150 N

Allowable vertical load (static)

Mx: 2 N·m

My: 1.5 N·m

Mz: 2.5 N·m

DH-ROBOTICS

Gripping force(per jaw)

10~35 N

Rotation torque

0.25 N·m

Opening/closing stroke(both sides)

14 mm

Rotation range

Unlimited spin

## Mechanical specifications

Maximum recommended load\* 0.7 kg

Maximum rotation speed 1500 deg/s

Rotation repeatability  $\pm 0.02$  deg

Position repeatability (both sides)  $\pm 0.02$  mm

Opening/closing time 0.3 s / 0.3 s

Weight 1.0 kg

## Electrical specifications

Communication Standard: Modbus RTU (RS485), Digital I/O interface Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

Nominal voltage 24 V DC  $\pm 10\%$

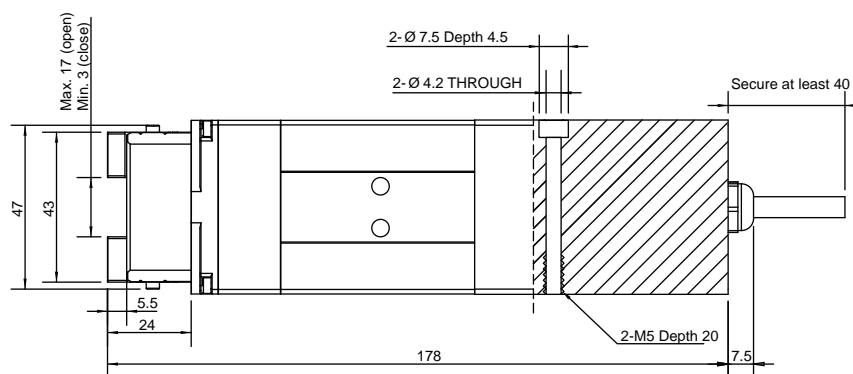
Nominal current 1.1 A

Peak current 2 A

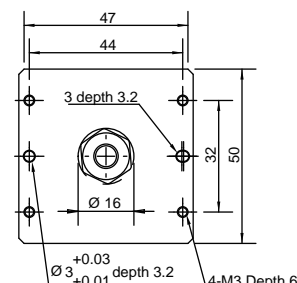
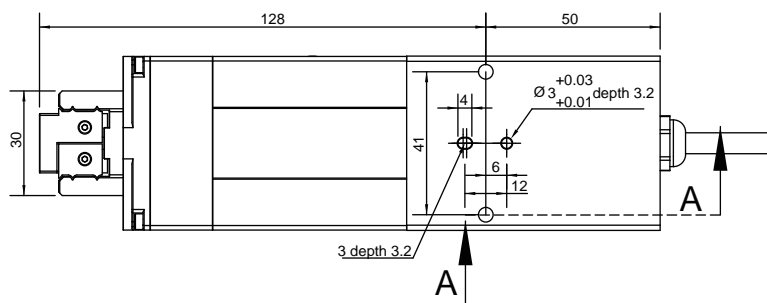
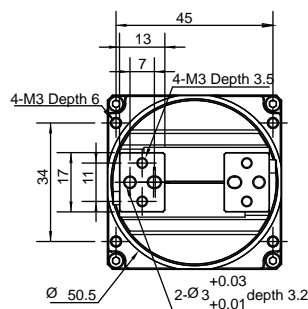
Ingress protection rating IP 20

Recommended operating environment 0~40°C, 85% RH under environment

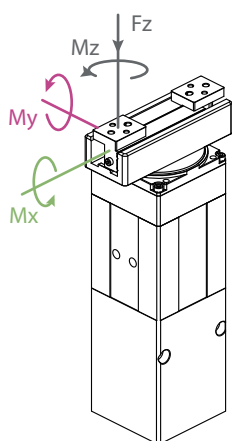
\*It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, if you have any questions, please consult us.



A-A Section



## Servo rotating grippers

Allowable vertical  
load (static)

$F_z:$  150 N

Allowable vertical  
load (static)
$$M_x: \quad 2 \text{ N} \cdot \text{m}$$

My: 1.5 N · m

**Mz:** 2.5 N · m

# DH-ROBOTICS

■ Gripping force(per jaw)

**10~35 N**

- Rotation torque

**0.25 N·m**

- Opening/closing stroke(both sides)

**30 mm**

- Rotation range

## Unlimited spin

### ■ Mechanical specifications

Maximum recommended load*	0.7 kg
Maximum rotation speed	1500 度/s
Rotation repeatability	± 0.02 度
Position repeatability (both sides)	± 0.02 mm
Opening/closing time	0.3 s/ 0.3 s
Weight	1.2 kg

### ■ Electrical specifications

**Communication interface** Standard: Modbus RTU (RS485), Digital I/O  
Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

Nominal voltage	24 V DC $\pm$ 10%
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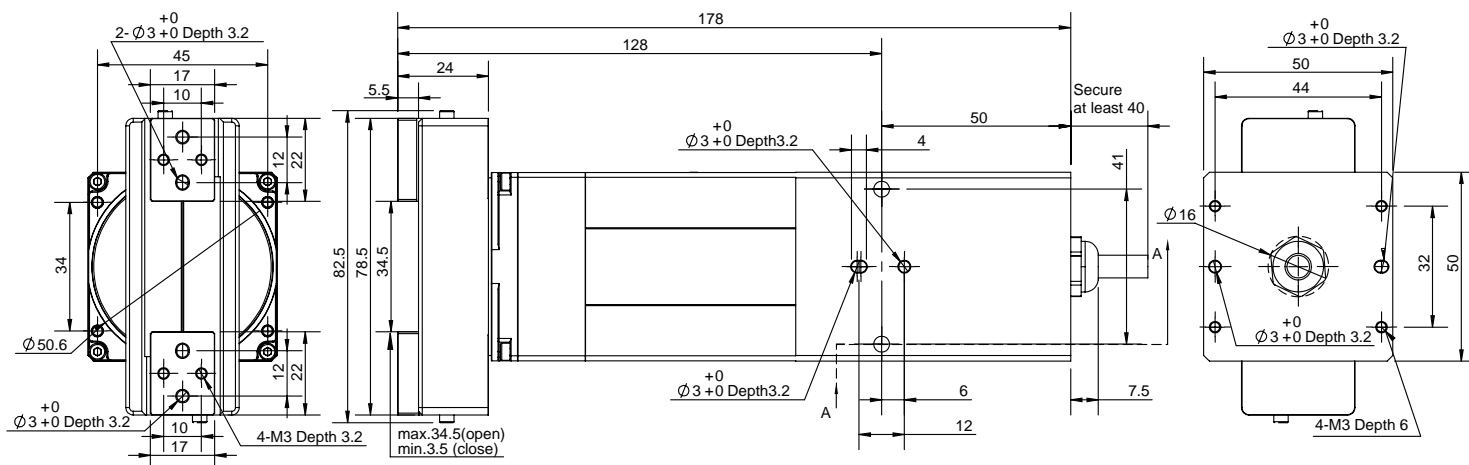
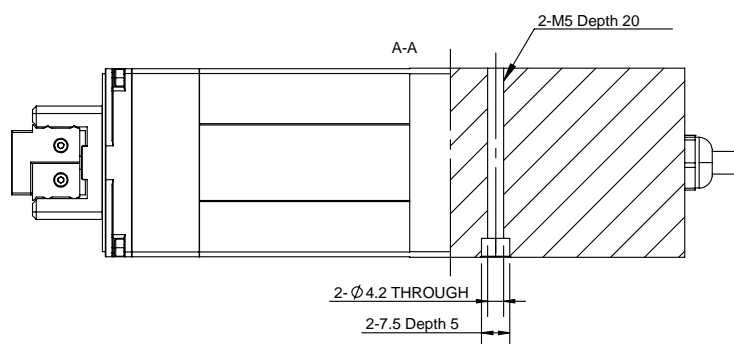
Nominal current	1.1 A
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Peak current	2 A
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Ingress protection rating	IP 20
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**Recommended operating environment** 0~40°C, 85% RH under

\*It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion. If you have any questions, please consult us.





# PGC 系列

## Collaborative parallel grippers

### Application field

The PGC series is able to applied with collabrative and industrial robots for loading, pick&place, assembly, inspection in machining, electronics, medical... etc. industries.

### Features

#### Plug and Play

The PGC series support the Plug & Play with most brands of collabrative robot.

#### High protection level

The PGC series is suitable for harsh working environment with the high protection level of IP54 and IP67.

#### Integrated design

The drive controller and communication are integrated inside the gripper, and can be used without external controller.

#### Self-locking\*

The PGC series is able to maintain the gripping of the work-piece when the power is off, and improve the safety of the gripping process

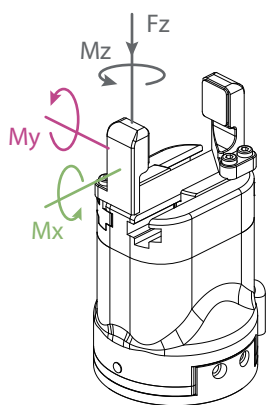
#### Intelligent feedback

The RGI series is easy to monitor the gripping and rotation process with the intelligent feedback of gripping & rotation status and drop detection

\*PGC-50 Except

# PGC-50

Collaborative parallel grippers



Allowable vertical load (static)

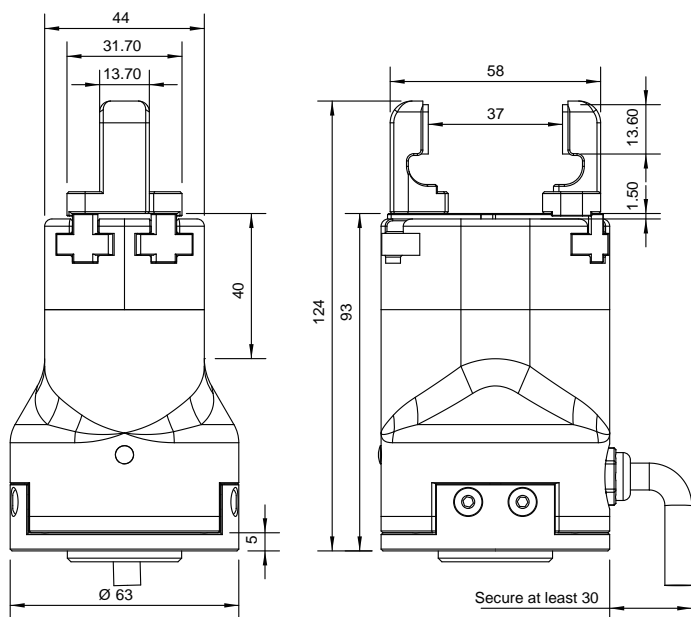
Fz: 150 N

Allowable vertical load (static)

Mx: 2.5 N·m

My: 2 N·m

Mz: 3 N·m



Gripping force(per jaw)

15~50 N

Opening/closing stroke(both sides)

35 mm

## Mechanical specifications

Maximum recommended load\* 1 kg

Position repeatability (both sides)  $\pm 0.03$  mm

Opening/closing time 0.7 s/0.7 s

Driving method Rack and pinion + T-slot guidance

Weight 0.5 kg

Noise emission < 50 dB

## Electrical specifications

Communication Standard: Modbus RTU (RS485), Digital I/O interface Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

Nominal voltage 24 V DC  $\pm 10\%$

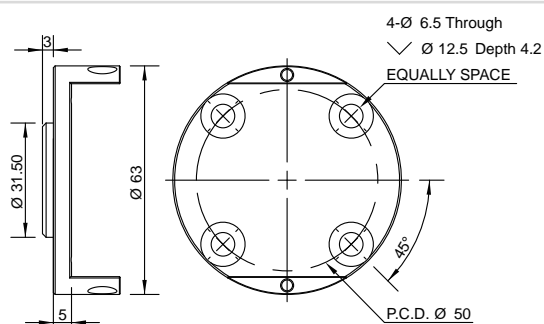
Nominal current 0.25 A

Peak current 0.5 A

Ingress protection rating IP 54

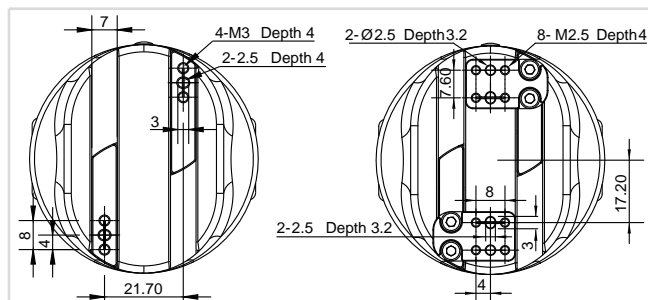
Recommended operating environment 0~40°C, 85% RH under environment

\*It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, if you have any questions, please consult us.



Conform to ISO 9409-1-50-4-M6 Standard flange

\*If you need to customize the flange, it is recommended to design according to the robot installation hole position, or contact us



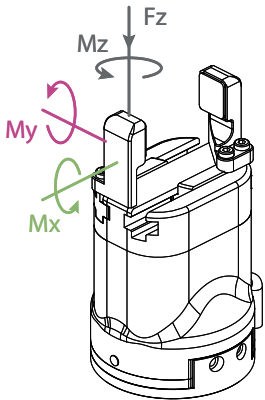
Rail mounting holes

Custom finger mounting size

\*If you need to customize the finger, it is recommended to design according to the size of the finger mounting plate, or contact us

# PGC-140

Collaborative parallel grippers



Allowable vertical load (static)

Fz: 300 N

Allowable vertical load (static)

Mx: 7 N·m

My: 7 N·m

Mz: 7 N·m

DH-ROBOTICS

Gripping force(per jaw)

40~140 N

Opening/closing stroke(both sides)

50 mm

## Mechanical specifications

Maximum recommended load\* 3 kg

Position repeatability (both sides)  $\pm 0.03$  mm

Opening/closing time 0.6 s/0.6 s

Driving method Rack and pinion + T-slot guidance

Weight 1 kg

Noise emission < 50 dB

## Electrical specifications

Communication Standard: Modbus RTU (RS485), Digital I/O interface Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

Nominal voltage 24 V DC  $\pm 10\%$

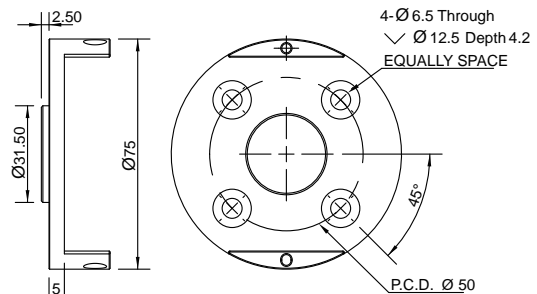
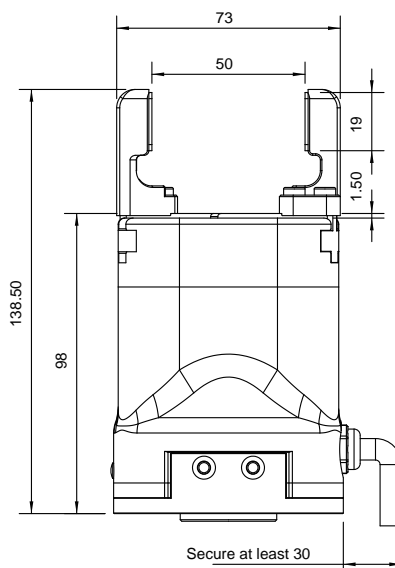
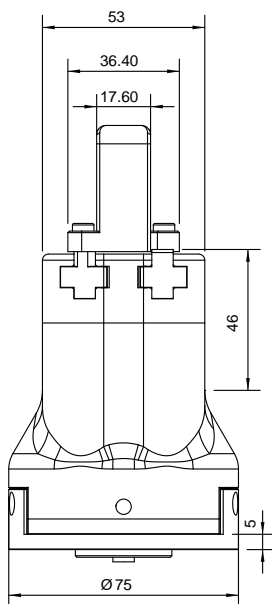
Nominal current 0.4 A

Peak current 1 A

Ingress protection rating IP 67

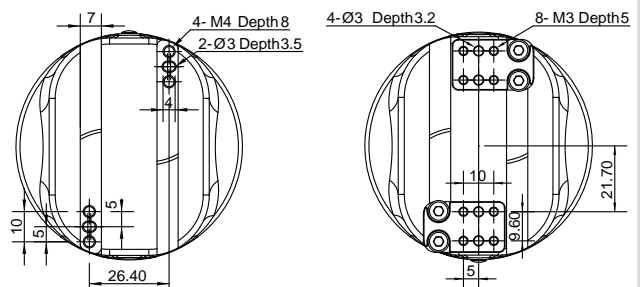
Recommended operating environment 0~40°C, 85% RH under environmen

\*It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, if you have any questions, please consult us.



Conform to ISO 9409-1-50-4-M6 Standard flange

\*If you need to customize the flange, it is recommended to design according to the robot installation hole position, or contact us



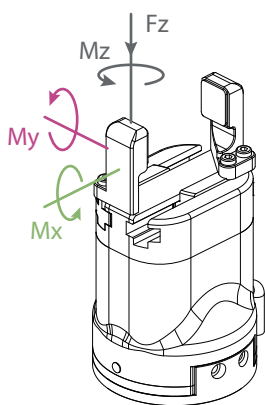
Rail mounting holes

Custom finger mounting size

\*If you need to customize the finger, it is recommended to design according to the size of the finger mounting plate, or contact us



## Collaborative parallel grippers

Allowable vertical  
load (static)

$F_z:$  600 N

Allowable vertical  
load (static)

$M_x:$  15 N · m

My: 15 N · m

---

Mz: 15 N · m

■ Gripping force(per jaw)

**40 ~ 300 N**

- Opening/closing stroke(both sides)

**60 mm**

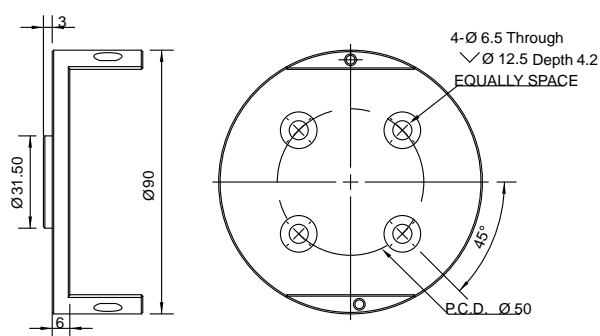
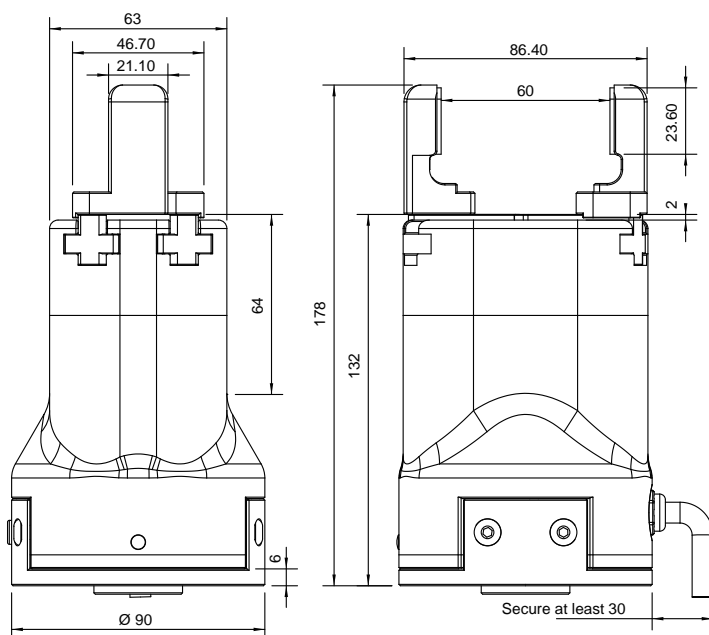
### ■ Mechanical specifications

Maximum recommended load*	6 kg
Position repeatability (both sides)	± 0.03 mm
Opening/closing time	0.8 s/0.8 s
Driving method	Rack and pinion + T-slot guidance
Weight	1.6 kg
Noise emission	< 50 dB

### ■ Electrical specifications

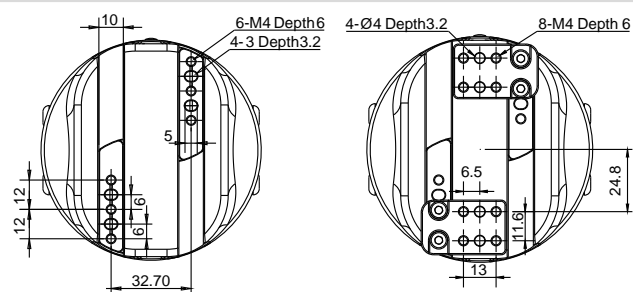
<b>Communication interface</b>	Standard: Modbus RTU (RS485) , Digital I/O Optional: TCP/IP, USB2.0, CAN2.0A,PROFINET,EtherCAT
<b>Nominal voltage</b>	24 V DC $\pm$ 10%
<b>Nominal current</b>	0.4 A
<b>Peak current</b>	2 A
<b>Ingress protection rating</b>	IP 67
<b>Recommended operating environment</b>	0~40°C, 85% RH under

\*It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion. If you have any questions, please consult us.



■ Conform to ISO 9409-1-50-4-M6 Standard flange

\*If you need to customize the flange, it is recommended to design according to the robot installation hole position, or contact us



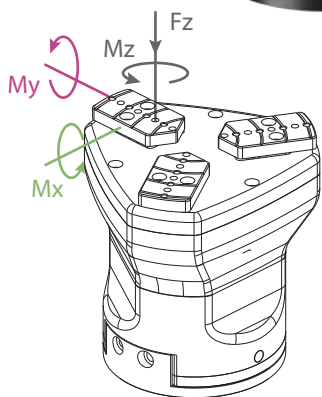
- Rail mounting holes

- Custom finger mounting size

\*If you need to customize the finger, it is recommended to design according to the size of the finger mounting plate, or contact us

# CGC-80

Collaborative parallel grippers



Allowable vertical load (static)

Fz: 200 N

Allowable vertical load (static)

Mx: 2.5 N·m

My: 2 N·m

Mz: 3 N·m

DH-ROBOTICS

Gripping force(per jaw)

20~80 N

Opening/closing stroke(both sides)

10 mm

## Mechanical specifications

Maximum recommended load\* 1.5 kg

Position repeatability (both sides)  $\pm 0.03$  mm

Opening/closing time 0.2 s/0.2 s

Driving method Rack and pinion + Linear guidance

Weight 1.5 kg

Noise emission < 50 dB

## Electrical specifications

Communication Standard: Modbus RTU (RS485), Digital I/O interface Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

Nominal voltage 24 V DC  $\pm 10\%$

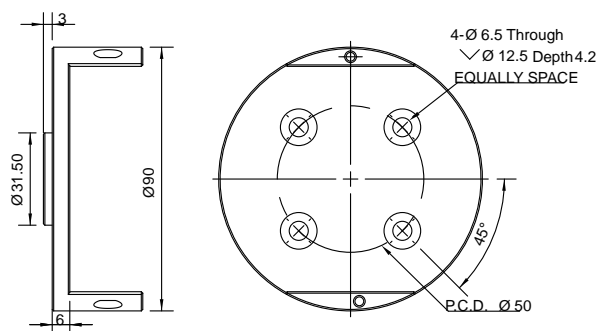
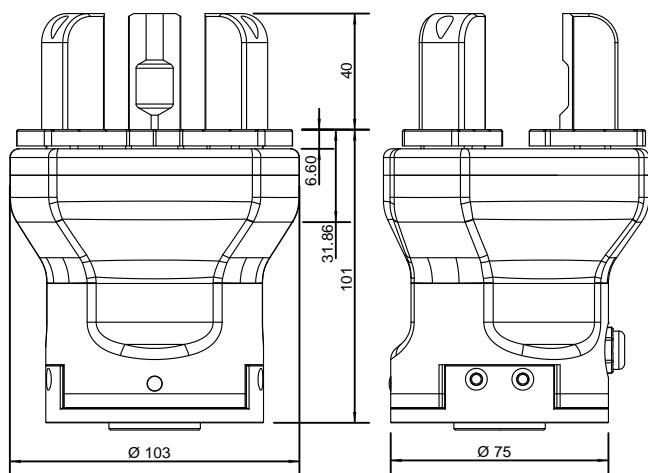
Nominal current 0.3 A

Peak current 1 A

Ingress protection rating IP 67

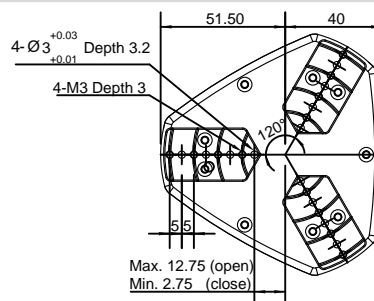
Recommended operating environment 0~40°C, 85% RH under environment

\*It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, if you have any questions, please consult us.



Conform to ISO 9409-1-50-4-M6 Standard flange

\*If you need to customize the flange, it is recommended to design according to the robot installation hole position, or contact us



Customize finger installation size

# AG Series

## Linkage-type adaptive grippers

### Application field

The AG/DH series is able to be applied with collaborative and industrial robots for loading, pick&place, assembly, inspection in machining, electronics, medical... etc. industries.

### Features

#### Plug and Play

The linkage-type adaptive grippers support the Plug & Play with most brands of collaborative robot.

#### Parallel & adaptive gripping

The linkage-type adaptive grippers are able to grip round, spherical or heterosexual workpieces with the flexible fingers.

#### Integrated design

The drive controller and communication are integrated inside the gripper, and can be used without external controller.

#### Long stroke and adjustable gripping force

With 80mm stroke, the PGI-140 is compatible to grip objects with different size.

#### Self-locking

The PGC series is able to maintain the gripping of the workpiece when the power is off, and improve the safety of the gripping process.

#### Intelligent feedback

The AG/DH series is easy to monitor the gripping process according to the functions such as grasping status detection, real-time position detection and drop detection.

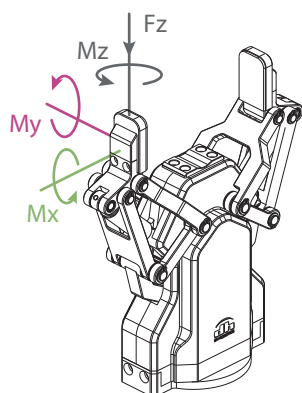
AG — Adaptive Gripper

# AG-95

## Linkage-type adaptive grippers



reddot award 2019  
winner



Allowable vertical  
load (static)

Fz: 300 N

Allowable vertical  
load (static)

Mx: 4.75 N·m

My: 4.75 N·m

Mz: 4.75 N·m

DH-ROBOTICS

Gripping force(per jaw)

45~160 N

Opening/closing  
stroke(both sides)

95 mm

### Mechanical specifications

Maximum recommended load\*\* 3 kg

Position repeatability (both sides)  $\pm 0.03$  mm

Opening/closing time 0.7 s/0.7 s

Driving method Screw drive +Linkage system

Weight 1 kg

Noise emission < 50 dB

### Electrical specifications

Communication Standard: Modbus RTU (RS485), Digital I/O  
interface Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

Nominal voltage 24 V DC  $\pm 10\%$

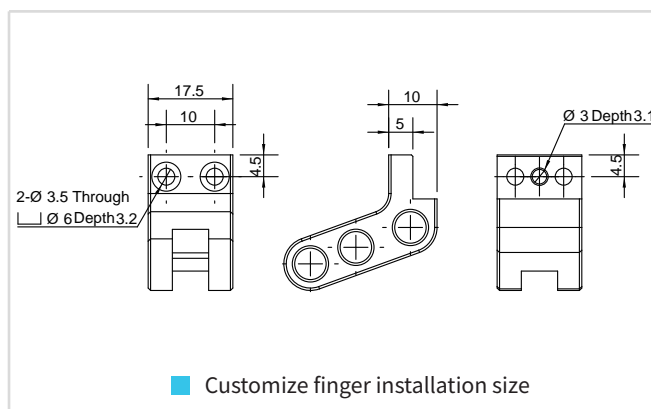
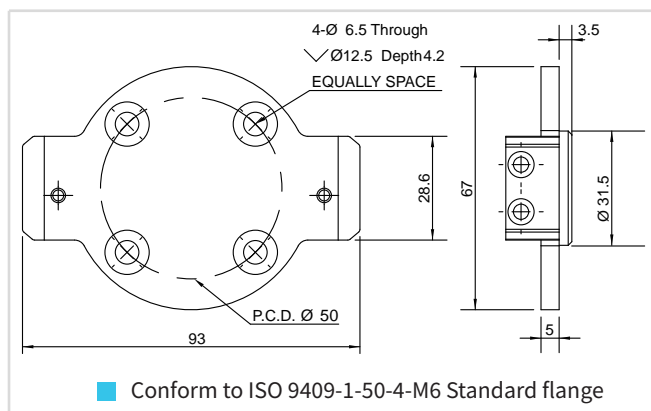
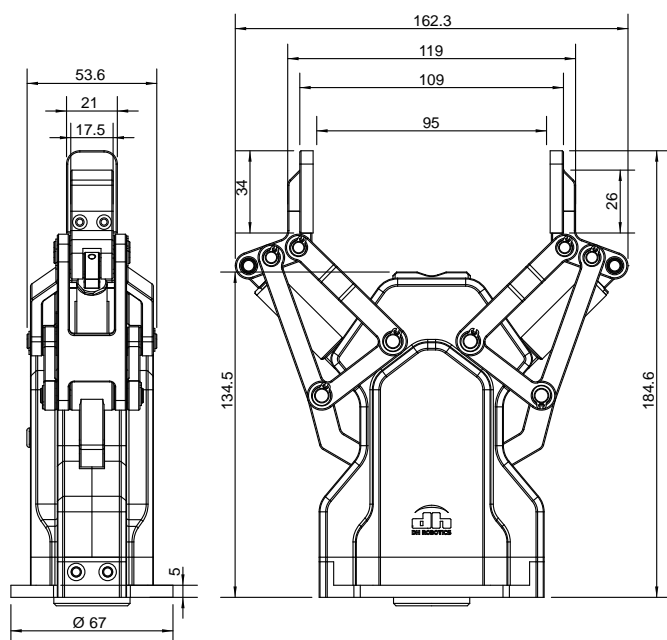
Nominal current 0.8 A

Peak current 1.5 A

Ingress protection rating IP 54

Recommended operating 0~40°C, 85% RH under  
environmen

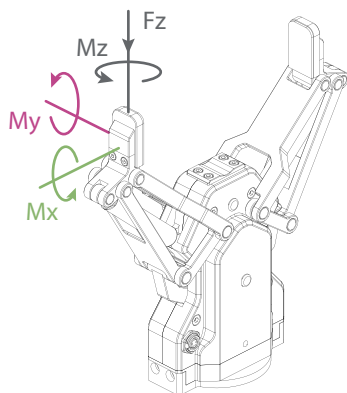
\*取决于抓取物体形状、接触面材料与摩擦力以及运动加速度等因素，  
抓取物体的重心偏移也会影响负载，如有问题请咨询我们。





# AG-145

Linkage-type adaptive grippers



Allowable vertical load (static)

Fz: 300 N

Allowable vertical load (static)

Mx: 1.95 N·m

My: 1.95 N·m

Mz: 1.95 N·m

DH-ROBOTICS

Gripping force(per jaw)

35~105 N

Opening/closing stroke(both sides)

145 mm

## Mechanical specifications

Maximum recommended load\*\* 2 kg

Position repeatability (both sides)  $\pm 0.03$  mm

Opening/closing time 0.7 s/0.7 s

Driving method Screw drive +Linkage system

Weight 1.3 kg

Noise emission < 50 dB

## Electrical specifications

Communication Standard: Modbus RTU (RS485), Digital I/O interface Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT

Nominal voltage 24 V DC  $\pm 10\%$

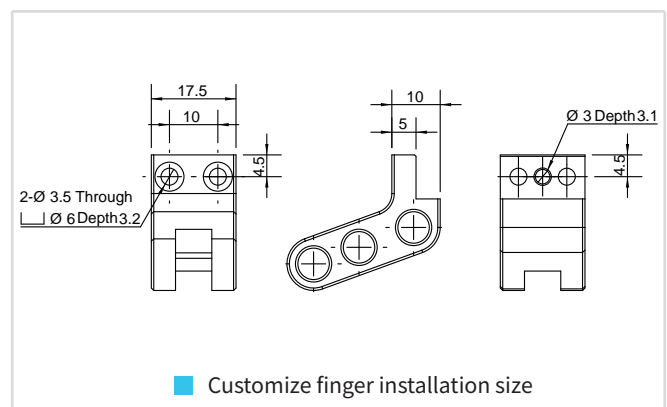
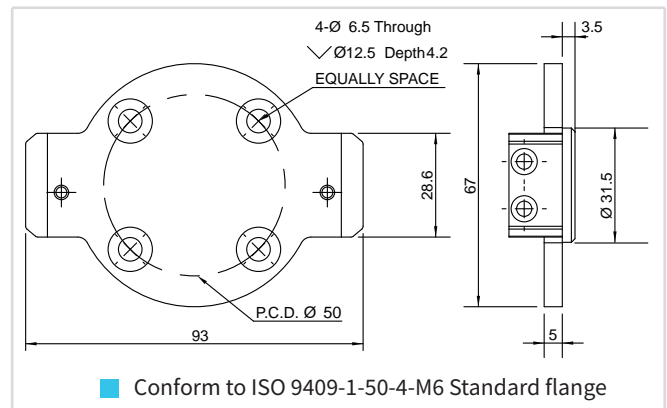
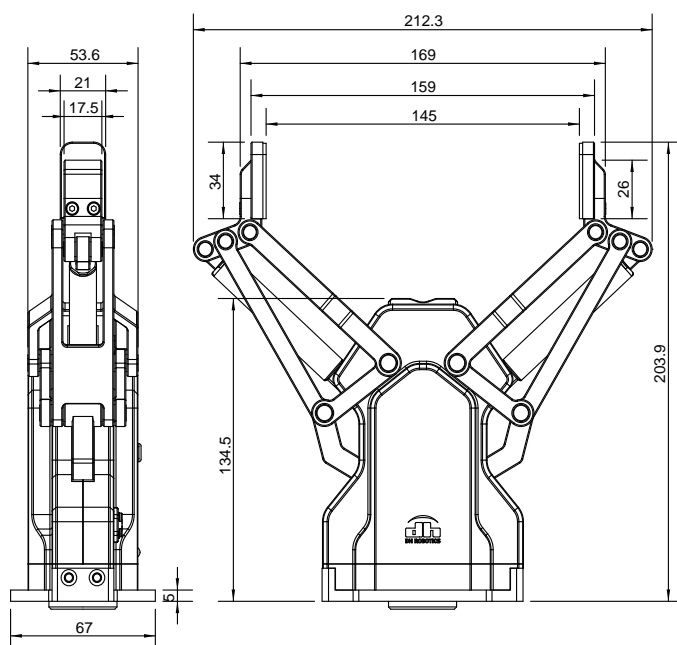
Nominal current 0.8 A

Peak current 1.5 A

Ingress protection rating IP 54

Recommended operating environment 0~40°C, 85% RH under environmen

\*取决于抓取物体形状、接触面材料与摩擦力以及运动加速度等因素，抓取物体的重心偏移也会影响到负载，如有问题请咨询我们。



## Linkage-type adaptive grippers



Allowable vertical  
load (static)

$F_z:$  300 N

Allowable vertical  
load (static)

$M_x:$  2.5 N · m

$M_y:$   $2 \text{ N} \cdot \text{m}$

**Mz:** 3 N · m

# DH-ROBOTICS

■ Gripping force(per jaw)

■ Opening/closing stroke(both sides)

**10~65 N 106 mm(parallel)**  
**122 mm(centering)**

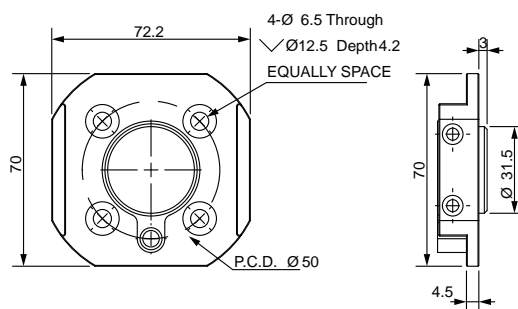
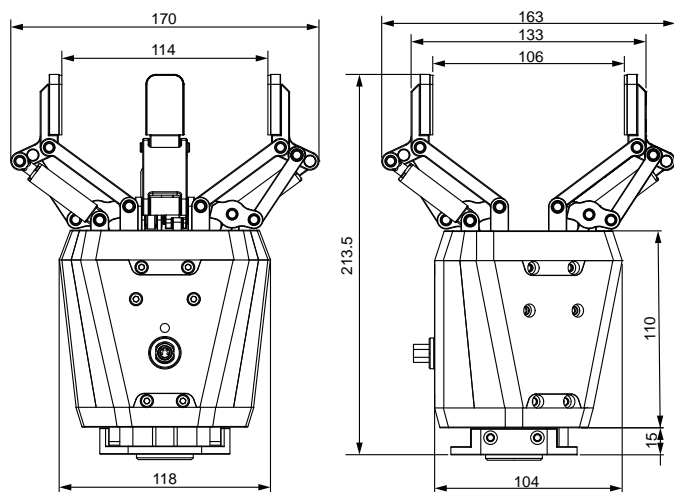
### ■ Mechanical specifications

Maximum recommended load**	1.8 kg
Position repeatability (both sides)	± 0.03 mm
Opening/closing time	0.7 s/0.7 s
Driving method	Screw nut + gear drive + linkage mechanism
Weight	1.68 kg
Noise emission	< 50 dB

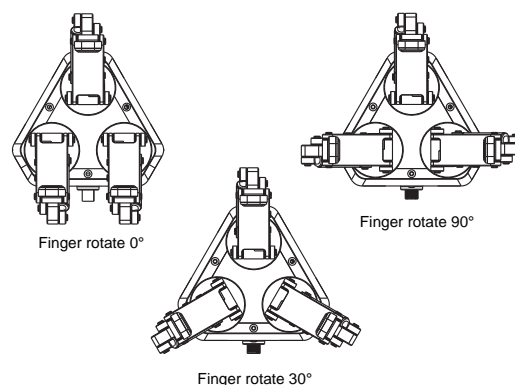
### ■ Electrical specifications

<b>Communication interface</b>	Standard: Modbus RTU (RS485) , Digital I/O Optional: TCP/IP, USB2.0, CAN2.0A,PROFINET,EtherCAT
<b>Nominal voltage</b>	24 V DC $\pm$ 10%
<b>Nominal current</b>	0.5 A
<b>Peak current</b>	1 A
<b>Recommended operating environment</b>	0~40°C, 85% RH under

\*取决于抓取物体形状、接触面材料与摩擦力以及运动加速度等因素，  
抓取物体的重心偏移也会影响到负载，如有问题请咨询我们。



■ Conform to ISO 9409-1-50-4-M6 Standard flange



## Robot ecosystem partner (names not listed in order) :



## DH-ROBOTICS client (names not listed in order) :



All products strictly follow the standard of CE, FCC, RoHS.



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[info@dh-robotics.com](mailto:info@dh-robotics.com)

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