

PGE/CGE Series

Slim-type electric 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.

PGI/CGI Series

Electric 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.

PGE-2-12

Slim-type electric parallel gripper

DH-ROBOTICS

Gripping force

Stroke

0.8~2 N

12 mm



Mechanical specifications

Recommended workpiece weight*	0.05 kg
Repeat accuracy (positioning)	± 0.02 mm
Opening/closing time	0.2 s/0.2 s
Driving method	Rack and pinion + Cross roller guide
Weight	0.15 kg
Noise emission	< 40 dB
Controller Electronics	Split type

Electrical specifications

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

Rated voltage 24 V DC ± 10%

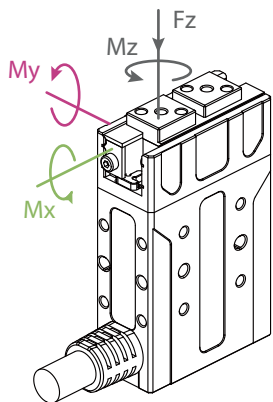
Rated current 0.2 A

Peak current 0.5 A

IP class IP 40

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

*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 contact us.



Allowable vertical load (static)

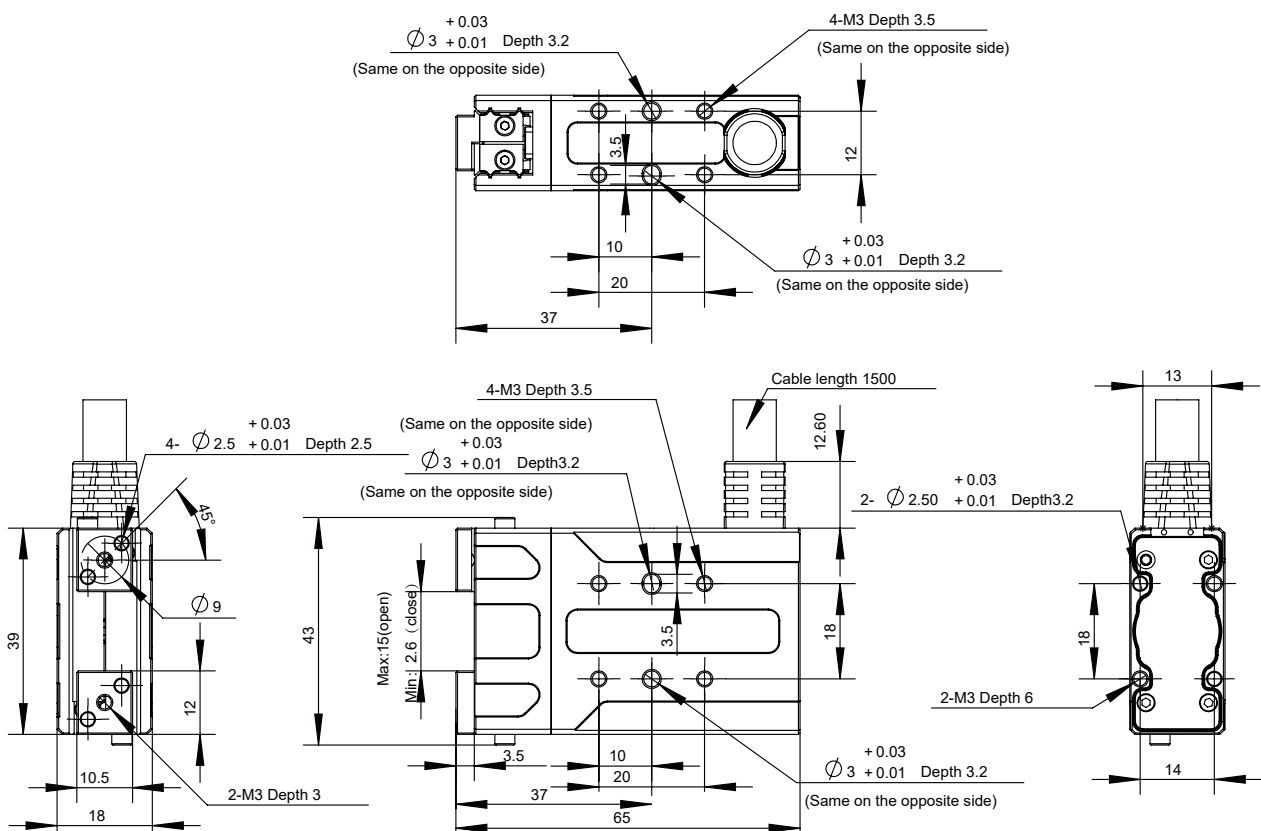
Fz: 35 N

Allowable vertical load (static)

Mx: 0.2 N·m

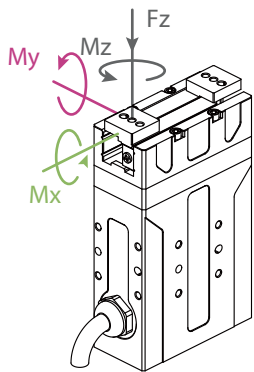
My: 0.17 N·m

Mz: 0.2 N·m



PGE-5-26

Slim-type electric parallel gripper



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

DH-ROBOTICS

Gripping force

0.8~5 N

Stroke

26 mm

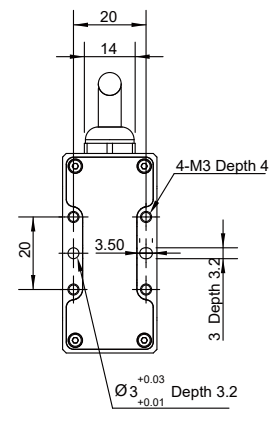
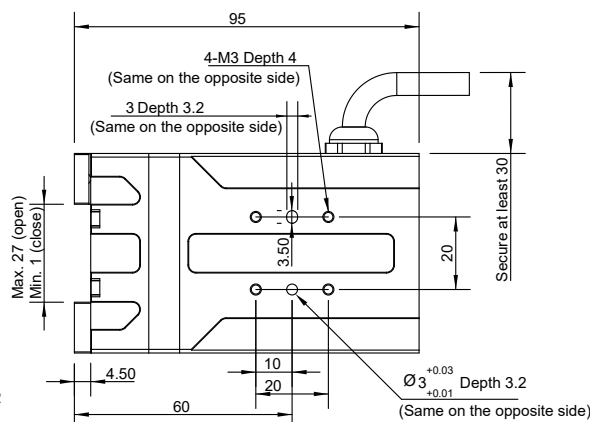
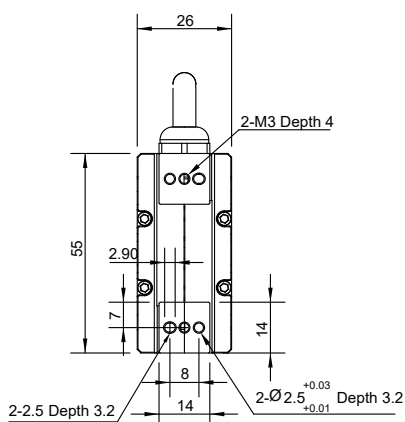
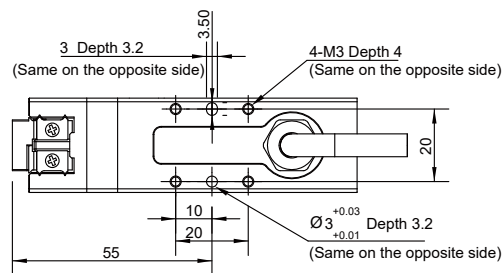
Mechanical specifications

Recommended workpiece weight*	0.1 kg
Repeat accuracy(gripping)	± 0.3 N
Repeat accuracy (positioning)	± 0.02 mm
Opening/closing time	0.2 s/0.2 s
Driving method	Rack and pinion + Cross roller guide
Weight	0.4 kg
Noise emission	< 40 dB

Electrical specifications

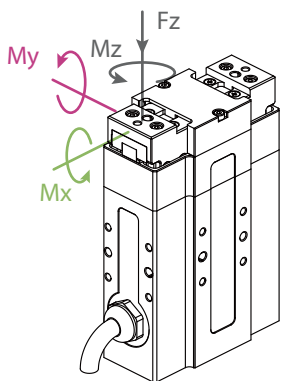
Communication interface	Standard: Modbus RTU (RS485), Digital I/O Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT
Rated voltage	24 V DC ± 10%
Rated current	0.4 A
Peak current	0.7 A
IP class	IP 40
Recommended environment	0~40°C, under 85% RH

*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 contact us.



PGE-8-14

Slim-type electric parallel gripper



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

DH-ROBOTICS

Gripping force

2~8 N

Stroke

14 mm

Mechanical specifications

Recommended workpiece weight*	0.1 kg
Repeat accuracy(gripping)	± 0.3 N
Repeat accuracy (positioning)	± 0.02 mm
Opening/closing time	0.2 s/0.2 s
Driving method	Rack and pinion + Linear guide
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

Rated voltage 24 V DC ± 10%

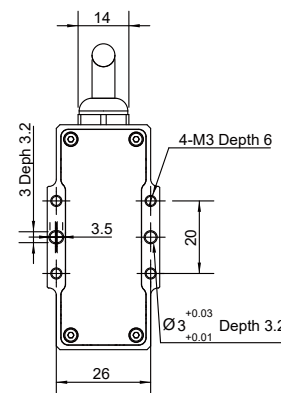
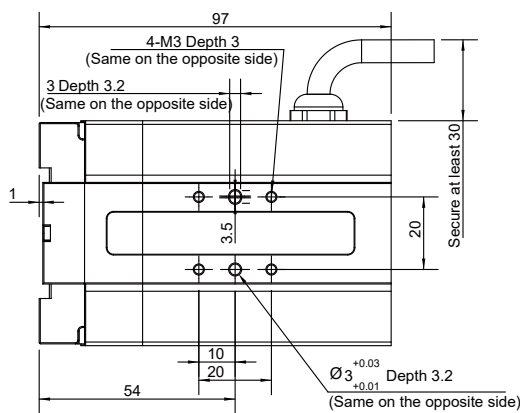
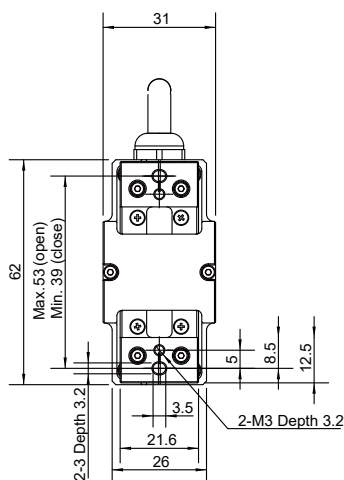
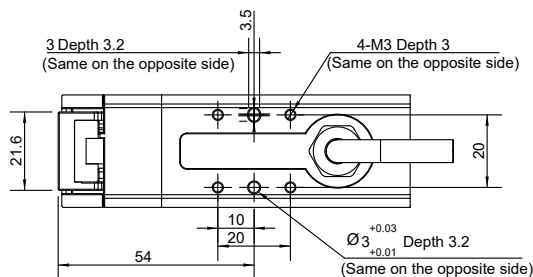
Rated current 0.4 A

Peak current 0.7 A

IP class IP 40

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

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PGE-15-26

Slim-type electric parallel gripper

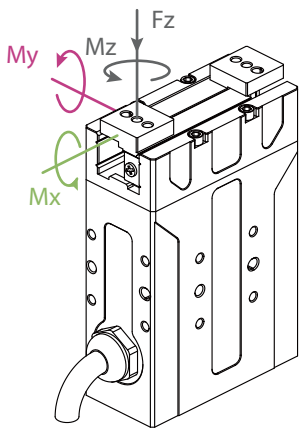
DH-ROBOTICS

Gripping force

Stroke

6~15 N

26 mm



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

Mechanical specifications

Recommended workpiece weight* 0.25 kg

Repeat accuracy (positioning) ± 0.02 mm

Opening/closing time 0.4 s/0.4 s

Driving method Precise planetary gears + Rack and pinion + Cross roller guide

Weight 0.33 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

Rated voltage 24 V DC ± 10%

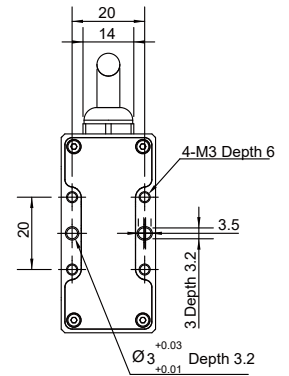
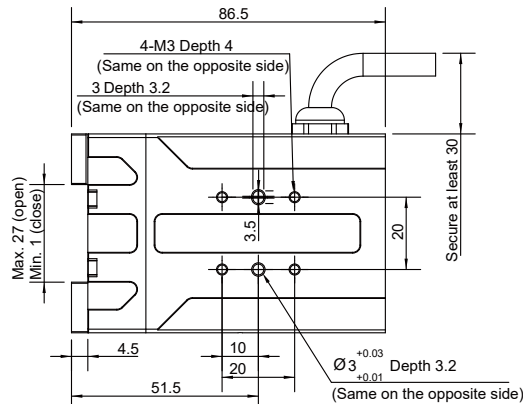
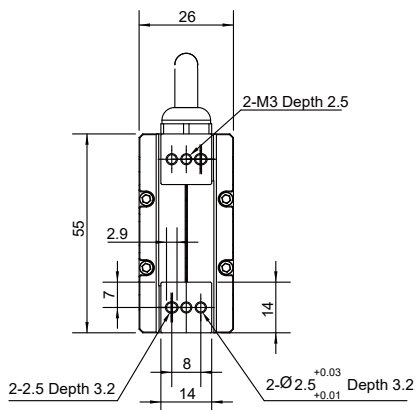
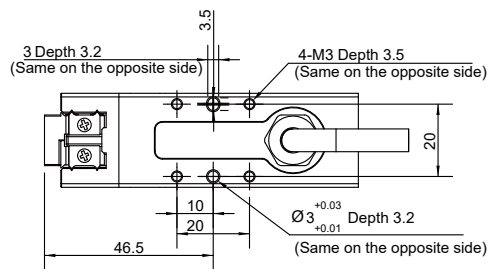
Rated current 0.25 A

Peak current 0.5 A

IP class IP 40

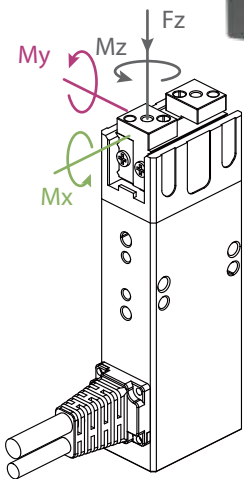
Recommended environment 0~40°C, under 85% RH

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PGE-15-10

Slim-type electric parallel gripper



Allowable vertical load (static)

Fz: 35 N

Allowable vertical load (static)

Mx: 0.45 N·m

My: 0.4 N·m

Mz: 0.45 N·m

DH-ROBOTICS

Gripping force

6~15 N

Stroke

10 mm

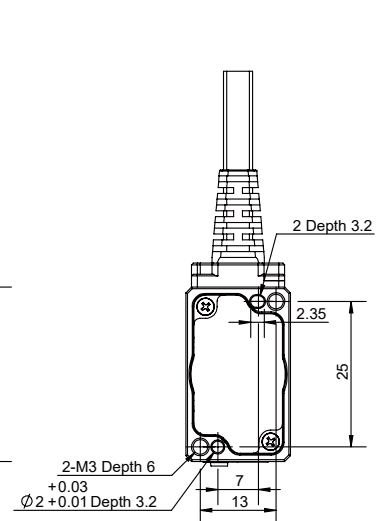
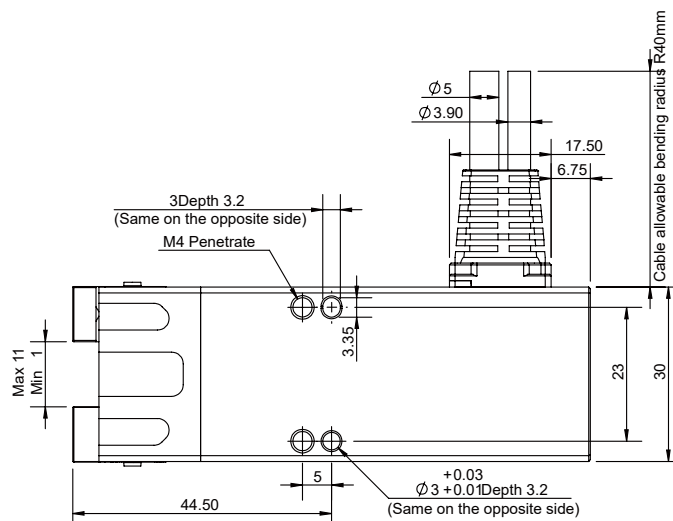
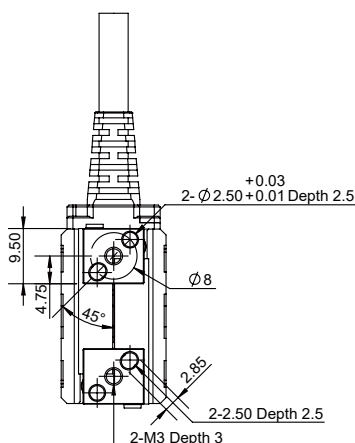
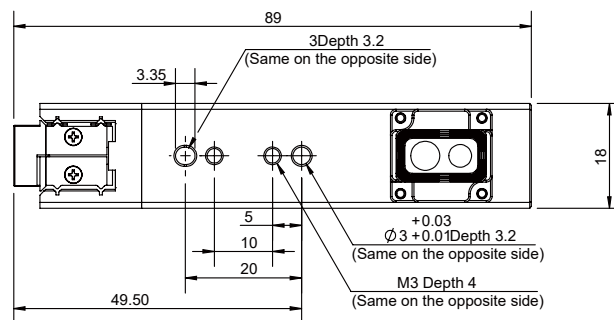
Mechanical specifications

Recommended workpiece weight*	0.25 kg
Repeat accuracy (positioning)	± 0.01 mm
Opening/closing time	0.25 s/0.25 s
Driving method	Precise planetary gears + Rack and pinion + Cross roller guide
Weight	0.155 kg
Noise emission	< 40 dB
Controller Electronics	Split Type

Electrical specifications

Communication interface	Standard: Modbus RTU (RS485), Digital I/O Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT
Rated voltage	24 V DC ± 10%
Rated current	0.1 A
Peak current	0.22 A
IP class	IP 40
Recommended environment	0~40°C, under 85% RH

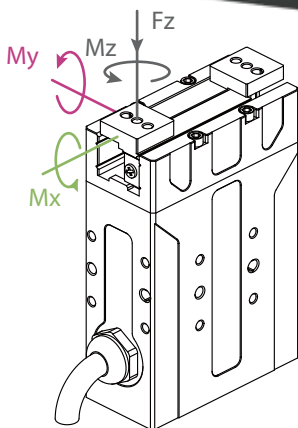
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PGE-50-26

Slim-type electric parallel gripper

DH-ROBOTICS



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

15~50 N

Stroke

26 mm

Mechanical specifications

Recommended workpiece weight*	1 kg
Repeat accuracy (positioning)	± 0.02 mm
Opening/closing time	0.3 s/0.3 s
Driving method	Precise planetary gears + Rack and pinion + Cross roller guide
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
Rated voltage	24 V DC ± 10%
Rated current	0.25 A
Peak current	0.5 A
IP class	IP 40
Recommended environment	0~40°C, under 85% RH

*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 contact us.

