DH-ROBOTICS

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Servo Electric Grippers

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Product Features

High-precision Control

Based on independently developed high-precision force control and other technologies, DH-ROBOTICS electric grippers can precisely adjust the gripping force and speed according to control signals, achieving high-precision positioning and gripping, ensuring the electric gripper stably and reliably grips precision objects, and completes tasks with high requirements for operational accuracy.

Highly Flexible

Diverse Installation Options:
The product offers a variety of installation methods, supporting 2 to 5 different installation directios.
Compact Structure and Small size:
Designed with an integrated approach, the product features a compact structure and small size, allowing for flexible application in limited spaces. It is compatible with lightweight collaborative robots, precision assembly, and other automation equipment, effectively helping enterprises build more compact and efficient automated production lines.
Wide Product Range:
The product lineup is extensive, including industrial parallel, industrial rotary, three-finger centering, and articulated types. This versatility not only meets the clamping needs for symmetric, planar workpieces but also caters to scenarios where workpiece surfaces have irregular curves or require clamping at specific angles.

Rapid Response

The fastest opening and closing time can reach 0.15 seconds, perfectly adapting to production scenarios with high cycle times, small batches, and multiple varieties, significantly improving production efficiency, reducing workpiece loss, and enhancing the flexibility of the overall production system. In addition, it can also reduce the relative error generated during the coordination between the electric gripper and the robot arm and other equipment.

Intelligent Feedback and Adaptation

Based on the proprietary 'intelligent technology' of DH-ROBOTICS and core technologies such as the 3KHz speed loop bandwidth response, the product has realized intelligent data feedback functions and can also be integrated into MES systems. Through process data transmission and feedback, remote monitoring and diagnosis are achieved, operational compensation deviations are adjusted automatically and in a timely manner, ensuring the accuracy and consistency of operations, and reducing product defect rates.

User-friendly and Easy to Maintain

With a modular design and a visual operation interface, the installation of DH-ROBOTICS electric grippers is convenient and the debugging is simple. Some series of products support plug-and-play with all mainstream collaborative robot brands on the market.
The product uses a high-energy permanent magnet synchronous motor, with almost zero mechanical wear during operation. It maintains high efficiency even under long-term high-load operation, has a longer lifespan, and requires almost no regular replacement of parts, significantly reducing maintenance workload and maintenance costs in long-term use.

DH-Robotics Core Technology

Precision Control and Feedback Technology

Mechanical clearance and error compensation, multi-encoder compensation technology, nm high-precision encoder technology, and programmable high-strength clamping technology. Repeat positioning accuracy can reach the nm level.

High-precision Force Control Technology

With industry-leading direct drive force feedback and high-precision force sampling, this technology delivers exceptional performance, including 3KHz high-response force control, 2g force control accuracy, and a closed-loop force control accuracy of up to 0.1g.

Integrated Technology

It can integrate autonomous drive, control, communication, encoders, motors, etc. The high power density transmission combined with intelligent software, makes it compact yet powerful, with optimized design for multiple scenarios, making it convenient and easy to use.

Intelligent Technology

Intelligent load identification, self-tuning, vibration suppression, high-speed response, intelligent prediction of force position accuracy loss, service life and fault prediction.

Our Support System

R&D System

New Technology
Innovation
R&D
Engineering Management

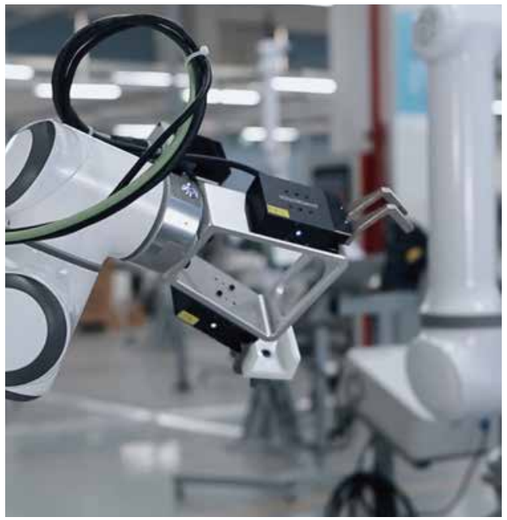
Sales Network

Projects Assessment
Training
Quality Supervision
After-sales Service

Manufacturing

Quality System
Stock Management
Supply Management
Manufacturing

Application Cases



PGE-8-14 Automatic Application

One collabotative robot with two electric grippers to complete the loading and unloading.

PGE-8-14 Electronics

Handling and positioning of very small workpieces.

PGC-50-35 Automation

Two PGC-50-35 grippers were applied with UR robot to pick& place the work-pieces on production line.

AG-160-95 Automotive

AG-160-95 electric gripper was applied with a collaborative robot to complete the clamping and assembly of needle roller bearings.

RGI-35-14 Medical Automation

Automated cup handling system: The gripper transfers a test tube to a specified position, rotates to open the cap, then automatically re-caps and returns it safely.

PGE-15-26 Medical Automation

Double-channel scan code to read the information, and unscrew the tube cover. Participate in automatic cup sharing process.

PGC-140-50 Robot New Retail

The PGC-140-50 was applied with DOOSAN robot to complete a show in CHANEL stores located in 20 countries to celebrate the 100th anniversary of CHANEL No. 5 perfume.

AG-160-95 Machining

The AG-160-95 electric gripper was applied with AGV and COBOT to complete machine tool loading and unloading and machine tool equipment management.

Electric Parallel Grippers

PGE / PGSE / PGI /PGC /PGHL Series

Serie	Gripping Force (Per Jaw)	Recommended Workpiece Weight	Stroke	Reference Page
PGE-2-12	0.8~2 N	0.05 kg	12 mm	P09-10
PGE-5-26	0.8~5 N	0.1 kg	26 mm	P11-12
PGE-8-14	2~8 N	0.1 kg	14 mm	P13-14
PGE-15-10	6~15 N	0.25 kg	10 mm	P15-16
PGE-15-26	6~15 N	0.25 kg	26 mm	P17-18
PGE-50-26/40	15~50 N	1 kg	26/40 mm	P19-20
PGE-100-26	30~100 N	2 kg	26 mm	P21-22
PGSE-15-7	6~15 N	0.25 kg	7 mm	P23-24
PGI-80/140-80	16~80 N/40~140 N	3 kg	80 mm	P25-26
PGC-50-35	15~50 N	1 kg	37 mm	P27-28
PGC-140-50	40~140 N	3 kg	50 mm	P29-30
PGC-300-60	80~300 N	6 kg	80 mm	P31-32
PGHL-400-80	140~400 N	8 kg	80 mm	P33-34

Product Features

DH-Robotics has launched several series of Electric Parallel Grippers to meet diverse automation needs. The PGE series is widely popular for its high precision and compact size, with the PGSE-15-7 being its economic option; the PGI series is designed for heavy-duty, long-stroke applications; the PGHL series focuses on high-load, high-precision gripping; and the PGC series, designed for collaborative robots, has won the Red Dot Award and the IF Award, featuring high protection and ease of use.

PGE / PGSE Series

Small Size Flexible Installation

With a minimum thickness of only **18mm**, the compact structure reduces the load and moment of inertia on the robot/module spindle, which helps to lighten the load of the robot/module and increase the speed. At the same time, it supports a variety of installation methods to meet the needs of gripping tasks and save design space.

High Working Speed

The fastest opening and closing time can reach **0.15 s / 0.15 s**,which can meet the high-speed and stable clamping requirements of the production line.

Precise Force Control

With special driver design and driving algorithm compensation, the gripping force is continuously adjustable, and the force repeat ability could reach **0.1 N**.

PGI / PGC / PGHL Series

Long Stroke High Load

Industrial large stroke gripper, with a maximum single-side gripping force of **400N** and a maximum recommended load of **8kg**. The total stroke reaches **80mm**, and with the fingertips, it can stably grasp medium and large objects, meeting more diverse grasping needs.

High Protection Level

The PGC series boasts a maximum protection rating of **IP67**, while the PGI series reaches **IP54**, both industry-leading levels that can withstand harsh conditions such as those found in machine tool loading and unloading.

Quick Response Intelligent Planning Speed

Opening/closing time up to **1.0s/1.1s**, with speed control optimization and mechanical self-locking mechanism function, it can meet fast and stable gripping needs of the production line.

Application

Force control and flexible technologies are widely used in sectors like semiconductors, 3C electronics, and medical automation. They excel at handling miniature parts in compact production settings and also manage large, heavy workpieces in industries such as new energy lithium battery handling, automotive parts, and machining. Combined with collaborative robots, these technologies efficiently execute complex tasks in medical, 3C, and new energy industries, significantly boosting production efficiency, accuracy, and flexibility.

PGE-2-12

Slim-type Electric Parallel Gripper

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection
PGE	2	12	O	S	M1	L5	J0	F0

Brake	
O	Without Brake
S	Side
B	bottom

Cable Direction	
M1	Modbus (RS485)+I/O (NN)
M2	Modbus (RS485)+I/O (PP)
M3	Modbus (RS485)+I/O (NP)
M4	Modbus (RS485)+I/O (PN)

Communication Protocol	
LX	Without Extend Cable
L1	1m Cable
L3	3m Cable
L5	5m Cable
L10	10m Cable

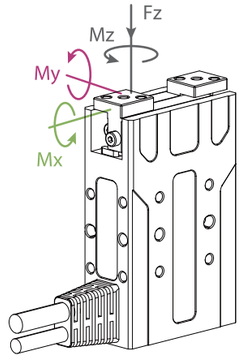
Fingertip Selection	
J0	Without Fingertip
J1	Standard Fingertip

Flange Selection	
F0	Without Flang

★①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

*② Cables longer than 10 meters pose a risk of communication interference.
*⑥ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	35 N

Allowable Loading Moment	
Mx	0.2 N·m
My	0.17 N·m
Mz	0.2 N·m

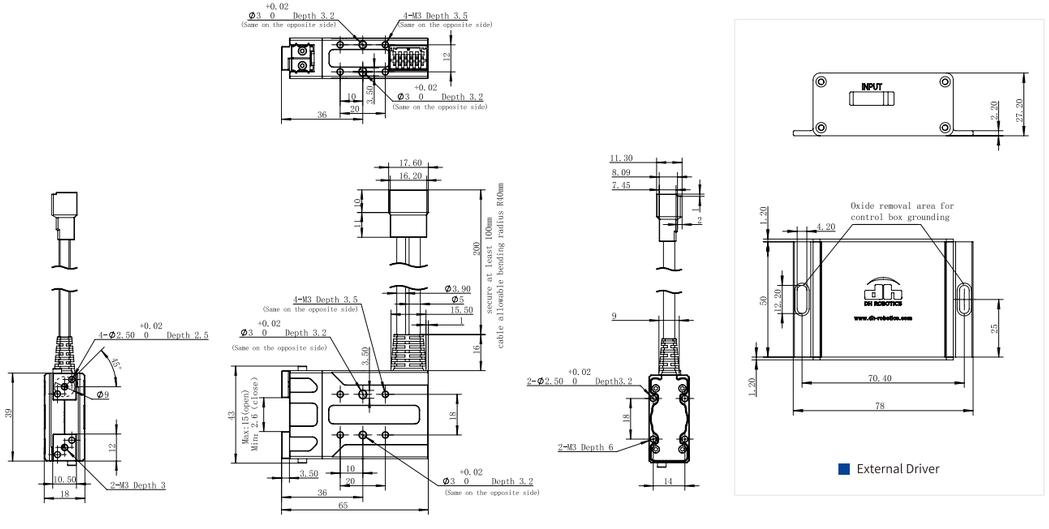
Product Parameter	
Gripping force (per jaw)	0.8~2 N
Recommended workpiece weight *③	0.05 kg
Stroke	12 mm
Full stroke opening/closing time	0.15 s/0.2 s
Repeat accuracy (position)	± 0.02 mm
Weight	0.15 kg
Size	Gripper Size: 65 mm x 39 mm x 18 mm Controller Size: 78 mm x 52.4 mm x 27.2 mm
Noise emission	< 50 dB
Driving method	Precise planetary gears + Rack and pinion

Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *④
Rated voltage	24 V DC ± 10%
Current	0.2 A(Rated)/ 0.5 A(Peak) *⑤
Rated power	4.8 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

*③ The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*④ Requires external communication convertor or customization, pleass contact sales or technical support.
*⑤ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Self-locking Mechanism
⊗	✓	✓	✓	✓	⊗

Technical Drawings



PGE-5-26

Slim-type Electric Parallel Gripper

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection	Robot Cable
PGE	5	26	O	S	M1	L5	J0	F0	00

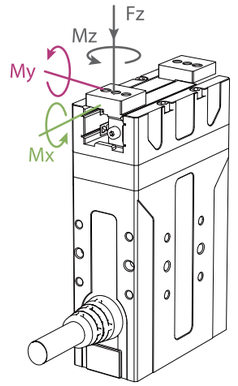
- Brake: **O** Without Brake
- Cable Direction: **S** Side; **B** bottom
- Communication Protocol (★① ★⑤): **M1** Modbus (RS485)+I/O (NN); **M2** Modbus (RS485)+I/O (PP); **M3** Modbus (RS485)+I/O (NP); **M4** Modbus (RS485)+I/O (PN)
- Cable Selection: **LX** Without Extend Cable; **L1** 1m Cable; **L3** 3m Cable; **L5** 5m Cable; **L10** 10m Cable; **L15** 15m Cable
- Fingertip Selection: **J0** Without Fingertip; **J1** Standard Fingertip
- Flange Selection: **F0** Without Flange
- Robot Cable: Table Below

★①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** Elite CS UR CB	SIASUN Hanwha A UR E	DOBOT CR DOBOT Nova	**02** AUBO	**04** JAKA	**06** ROKAE SR ROKAE ER	**09** Doosan A	**11** Elite EC	**13** Neuromeka	**15** Hanwha HCR		
				03 ELEPHANT	**05** TECHMAN	**07** DOBOT MG400	**10** Doosan M	**12** Han's	**14** FAIRINO	**16** UF x Arm	**17** ROKAE CR	

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	50 N

Allowable Loading Moment	
Mx	0.3 N·m
My	0.25 N·m
Mz	0.3 N·m

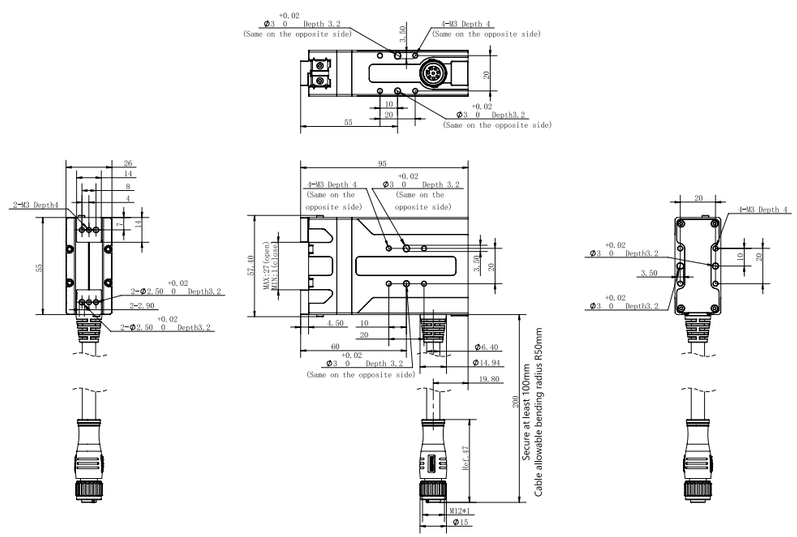
Product Parameter	
Gripping force (per jaw)	0.8~5 N
Recommended workpiece weight *②	0.1 kg
Stroke	26 mm
Full stroke opening/closing time	0.3 s/0.3 s
Repeat accuracy (position)	± 0.02 mm
Weight	0.4 kg
Size	95 mm x 55 mm x 26 mm
Noise emission	< 50 dB
Driving method	Precise planetary gears + Rack and pinion

Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.4 A(Rated)/ 0.7 A(Peak)*④
Rated power	9.6 W
IP class	IP 40
Recommended environment	0~40°C， under 85% RH
Certification	CE, FCC, RoHS

*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Self-locking Mechanism
✓	✓	✓	✓	✓	✗

Technical Drawings



PGE-8-14

Slim-type Electric Parallel Gripper

Selection Method

Serie		Gripping Force		Stroke		Brake		Cable Direction		Communication Protocol		Cable Selection		Fingertip Selection		Flange Selection		Robot Cable
PGE	-	8	-	14	-	O	-	S	-	M1	-	L5	-	J0	-	F0	-	00

Brake:

Code	Description
O	Without Brak

Cable Direction:

Code	Description
S	Side

Communication Protocol (*① *⑤):

Code	Description
M1	Modbus (RS485)+I/O (NN)
M2	Modbus (RS485)+I/O (PP)
M3	Modbus (RS485)+I/O (NP)
M4	Modbus (RS485)+I/O (PN)

Cable Selection:

Code	Description
LX	Without Extend Cable
L1	1m Cable
L3	3m Cable
L5	5m Cable
L10	10m Cable
L15	15m Cable

Fingertip Selection:

Code	Description
J0	Without Fingertip
J1	Standard Fingertip

Flange Selection:

Code	Description
F0	Without Flange

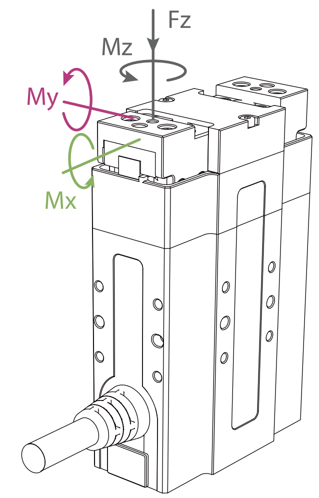
Robot Cable: Table Below

*①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** SIASUN, DOBOT CR, Elite CS, Hanwha A, DOBOT Nova, UR CB, UR E	**02** AUBO	**04** JAKA	**06** ROKAE SR, ROKAE ER	**09** Doosan A	**11** Elite EC	**13** Neuromeka	**15** Hanwha HCR
		03 ELEPHANT	**05** TECHMAN	**07** DOBOT MG400	**10** Doosan M	**12** Han's	**14** FAIRINO	**16** UF x Arm
								17 ROKAE CR

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur.
If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load

Fz	90 N

Allowable Loading Moment

Mx	0.55 N·m
My	0.45 N·m
Mz	0.55 N·m

*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Product Parameter

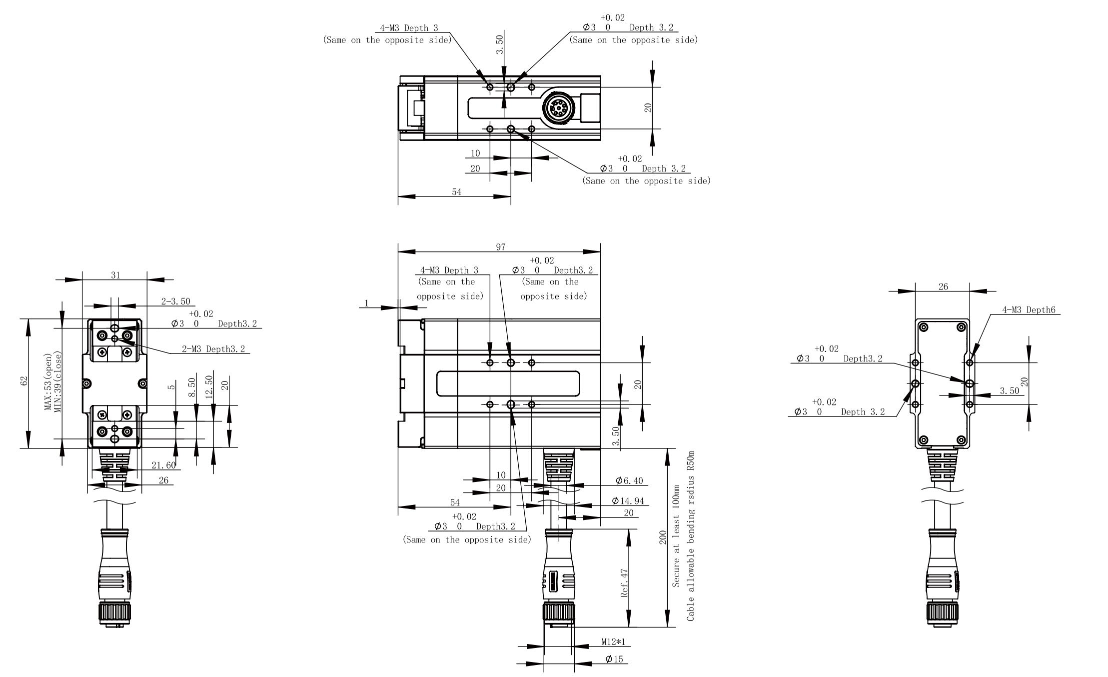
Gripping force (per jaw)	2~8 N
Recommended workpiece weight*②	0.1 kg
Stroke	14 mm
Full stroke opening/closing time	0.3 s/0.3 s
Repeat accuracy (position)	± 0.02 mm
Weight	0.4 kg
Size	97 mm x 62 mm x 31 mm
Noise emission	< 50 dB
Driving method	Precise planetary gears + Rack and pinion

Working Environment

Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.4 A (Rated) / 0.7 A (Peak) *④
Rated power	9.6 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Self-locking Mechanism
✓	✓	✓	✓	✓	✗

Technical Drawings



PGE-15-10

Slim-type Electric Parallel Gripper

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection
PGE	15	10	O	S	M1	L5	J0	F0

★①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

Brake	
O	Without Brake

Cable Direction	
S	Side
B	bottom

Communication Protocol ★①★⑥	
M1	Modbus (RS485)+I/O (NN)
M2	Modbus (RS485)+I/O (PP)
M3	Modbus (RS485)+I/O (NP)
M4	Modbus (RS485)+I/O (PN)

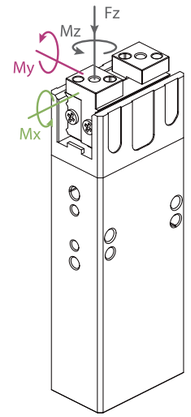
Cable Selection ★②	
LX	Without Extend Cable
L1	1m Cable
L3	3m Cable
L5	5m Cable
L10	10m Cable

Fingertip Selection	
J0	Without Fingertip
J1	Standard Fingertip

Flange Selection	
F0	Without Flange

*② Cables longer than 10 meters pose a risk of communication interference.
*⑥ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	35 N

Allowable Loading Moment	
Mx	0.45 N·m
My	0.4 N·m
Mz	0.45 N·m

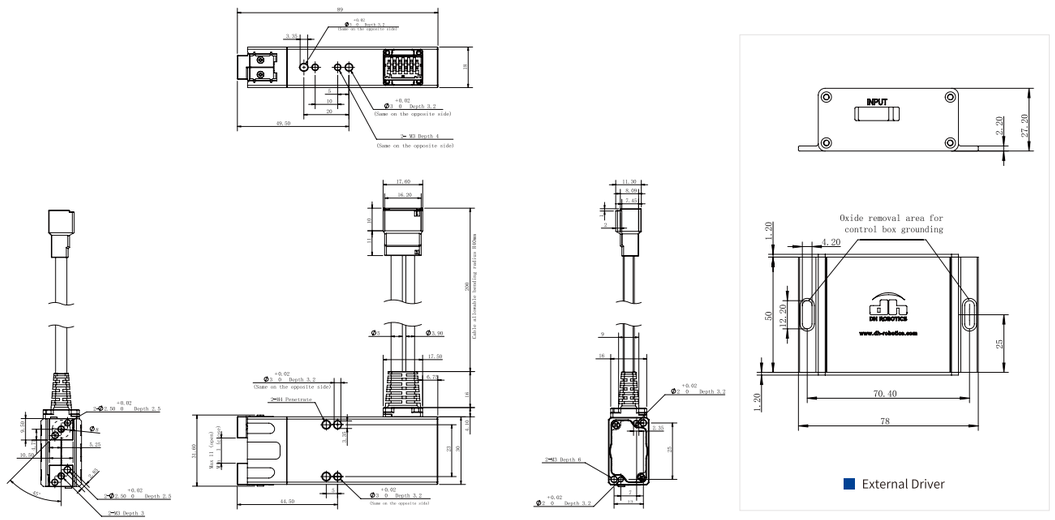
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Product Parameter	
Gripping force (per jaw)	6~15 N
Recommended workpiece weight *③	0.25 kg
Stroke	10 mm
Full stroke opening/closing time	0.3 s/0.3 s
Repeat accuracy (position)	± 0.02 mm
Weight	0.155 kg
Size	Gripper Size: 89 mm x 30 mm x 18 mm Controller Size: 78 mm x 52.4 mm x 27.2 mm
Noise emission	< 50 dB
Driving method	Precise planetary gears + Rack and pinion

Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *④
Rated voltage	24 V DC ± 10%
Current	0.1 A (Rated) / 0.22 A (Peak) *⑤
Rated Power	2.4 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Self-locking Mechanism
⊗	✓	✓	✓	✓	⊗

Technical Drawings



PGE-15-26

Slim-type Electric Parallel Gripper

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection	Robot Cable
PGE	15	26	O	S	M1	L5	J0	F0	00

Brake
- **O** Without Brake
- **W** With Brake

Cable Direction
- **S** Side
- **B** bottom

Communication Protocol ★① ★⑤
- **M1** Modbus (RS485)+I/O (NN)
- **M2** Modbus (RS485)+I/O (PP)
- **M3** Modbus (RS485)+I/O (NP)
- **M4** Modbus (RS485)+I/O (PN)

Cable Selection
- **LX** Without Extend Cable
- **L1** 1m Cable
- **L3** 3m Cable
- **L5** 5m Cable
- **L10** 10m Cable
- **L15** 15m Cable

Fingertip Selection
- **J0** Without Fingertip
- **J1** Standard Fingertip

Flange Selection
- **F0** Without Flange

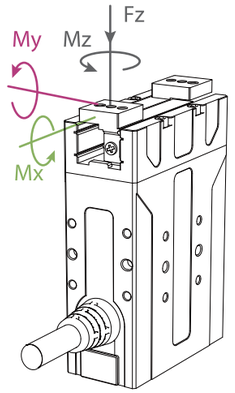
Robot Cable
- Table Below

★①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** Elite CS / UR CB	SIASUN / Hanwha A / UR E	DOBOT CR / DOBOT Nova	**02** AUBO	**03** ELEPHANT	**04** JAKA	**05** TECHMAN	**06** ROKAE SR / ROKAE ER	**07** DOBOT MG400	**09** Doosan A	**10** Doosan M	**11** Elite EC	**12** Han's	**13** Neuromeka	**14** FAIRINO	**15** Hanwha HCR	**16** UF x Arm	**17** ROKAE CR

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	70 N

Allowable Loading Moment	
Mx	0.9 N·m
My	0.75 N·m
Mz	0.9 N·m

*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

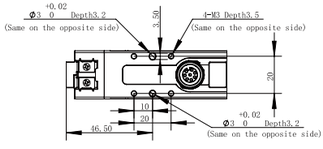
Product Parameter	
Gripping force (per jaw)	6~15 N
Recommended workpiece weight*②	0.25 kg
Stroke	26 mm
Full stroke opening/closing time	0.5 s/0.5 s
Repeat accuracy (position)	± 0.02 mm
Weight	0.33 kg
Size	86.5 mm x 55 mm x 26 mm(without brake) 107.5 mm x 55 mm x 26 mm(with brake)
Noise emission	< 50 dB
Driving method	Precise planetary gears + Rack and pinion

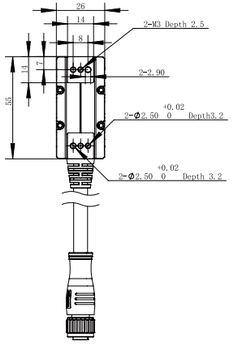
Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional:TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT*③
Rated voltage	24 V DC ± 10%
Current	0.25 A (Rated)/ 0.5 A (Peak)*④
Rated power	6 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

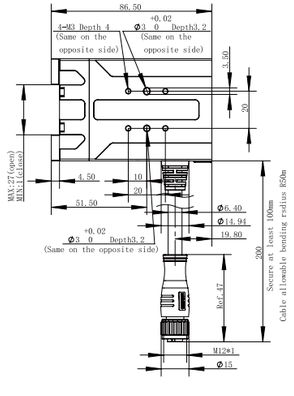
Build-in Controller · Gripping Force Adjustable · Position Adjustable · Speed Adjustable · Drop Detection · Self-locking Mechanism (optional)

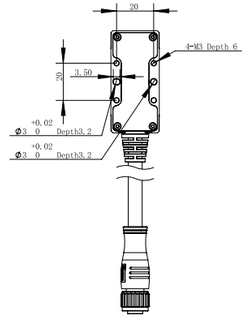
Technical Drawings

This drawing is for the gripper without the brake. If you need the drawing for the gripper with the brake, please download it from our official website or contact our sales.









PGE-50

Slim-type Electric Parallel Gripper

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection	Robot Cable
PGE	50	26	O	S	M1	L5	J0	F0	00
		40							

- Brake: **O** Without Brake; **W** With Brake
- Cable Direction: **S** Side; **B** bottom
- Communication Protocol (★① ★⑤): **M1** Modbus (RS485)+I/O (NN); **M2** Modbus (RS485)+I/O (PP); **M3** Modbus (RS485)+I/O (NP); **M4** Modbus (RS485)+I/O (PN)
- Cable Selection: **LX** Without Extend Cable; **L1** 1m Cable; **L3** 3m Cable; **L5** 5m Cable; **L10** 10m Cable; **L15** 15m Cable
- Fingertip Selection: **J0** Without Fingertip; **J1** Standard Fingerti
- Flange Selection: **F0** Without Flange
- Robot Cable: Table Below

★①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** Elite CS	SIASUN	DOBOT CR	**02** AUBO	**04** JAKA	**06** ROKAE SR ROKAE ER	**09** Doosan A	**11** Elite EC	**13** Neuromeka	**15** Hanwha HCR						
	UR CB	Hanwha A	DOBOT Nova	**03** ELEPHANT	**05** TECHMAN	**07** DOBOT MG400	**10** Doosan M	**12** Han's	**14** FAIRINO	**16** UF x Arm	**17** ROKAE CR					
	UR E															

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur.
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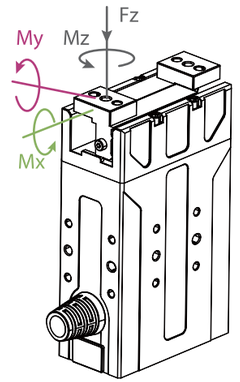
TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	150 N

Allowable Loading Moment	PGE-50-26	PGE-50-40
Mx	2.5 N·m	4.5 N·m
My	2 N·m	5 N·m
Mz	3 N·m	7 N·m

*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

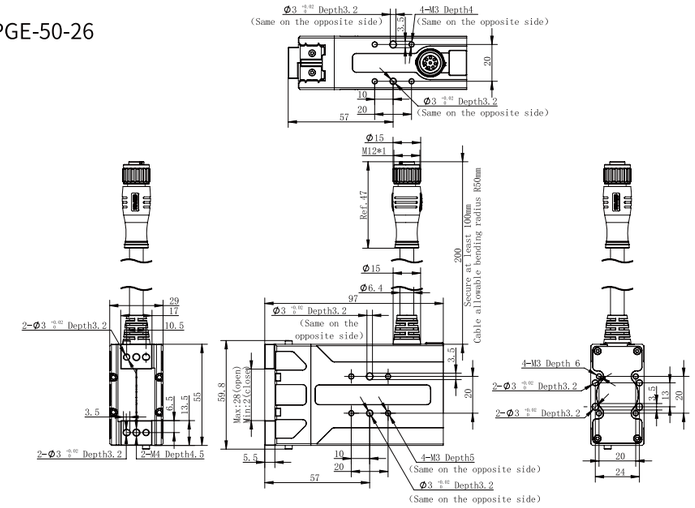
Product Parameter	PGE-50-26	PGE-50-40
Gripping force (per jaw)	15~50 N	15~50 N
Recommended workpiece weight *②	1 kg	1 kg
Stroke	26 mm	40 mm
Full stroke opening/closing time	0.45 s/0.45 s	0.6 s/0.6 s
Repeat accuracy (position)	± 0.02 mm	± 0.02 mm
Weight	0.4 kg	0.51 kg
Size	97 x 55 x 29 mm(without brake) 118 x 55 x 29 mm(with brake)	97 x 78 x 29 mm(without brake) 118 x 78 x 29 mm(with brake)
Noise emission	< 50 dB	< 50 dB
Driving method	Precise planetary gears + Rack and pinion	

Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.25 A (Rated)/ 0.5 A (Peak) *④
Rated Power	6 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

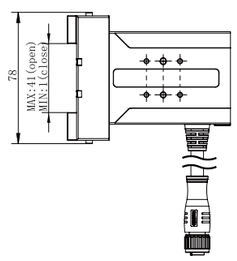
Build-in Controller · Gripping Force Adjustable · Position Adjustable · Speed Adjustable · Drop Detection · Self-locking Mechanism (optional)

Technical Drawings

PGE-50-26



PGE-50-40



This drawing is for the gripper without the brake. If you need the drawing for the gripper with the brake, please download it from our official website or contact our sales.

PGE-100-26

Slim-type Electric Parallel Gripper

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection	Robot Cable
PGE	100	26	O	S	M1	L5	J0	F0	00

- Brake: O Without Brake
- Cable Direction: S Side; B bottom
- Communication Protocol (★③ ★⑤): M1 Modbus (RS485)+I/O (NN); M2 Modbus (RS485)+I/O (PP); M3 Modbus (RS485)+I/O (NP); M4 Modbus (RS485)+I/O (PN)
- Cable Selection: LX Without Extend Cable; L1 1m Cable; L3 3m Cable; L5 5m Cable; L10 10m Cable; L15 15m Cable
- Fingertip Selection: J0 Without Fingertip; J1 Standard Fingertip
- Flange Selection: F0 Without Flange
- Robot Cable: Table Below

★①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** Elite CS UR CB	SIASUN Hanwha A UR E	DOBOT CR DOBOT Nova	**02** AUBO	**04** JAKA	**06** ROKAE SR ROKAE ER	**09** Doosan A	**11** Elite EC	**13** Neuromeka		**15** Hanwha HCR					
				03 ELEPHANT	**05** TECHMAN	**07** DOBOT MG400	**10** Doosan M	**12** Han's	**14** FAIRINO	**16** UF x Arm	**17** ROKAE CR					

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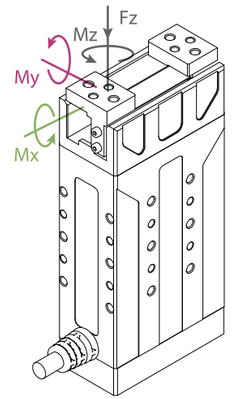
TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	150 N

Allowable Loading Moment	
Mx	2.5 N·m
My	3 N·m
Mz	4 N·m

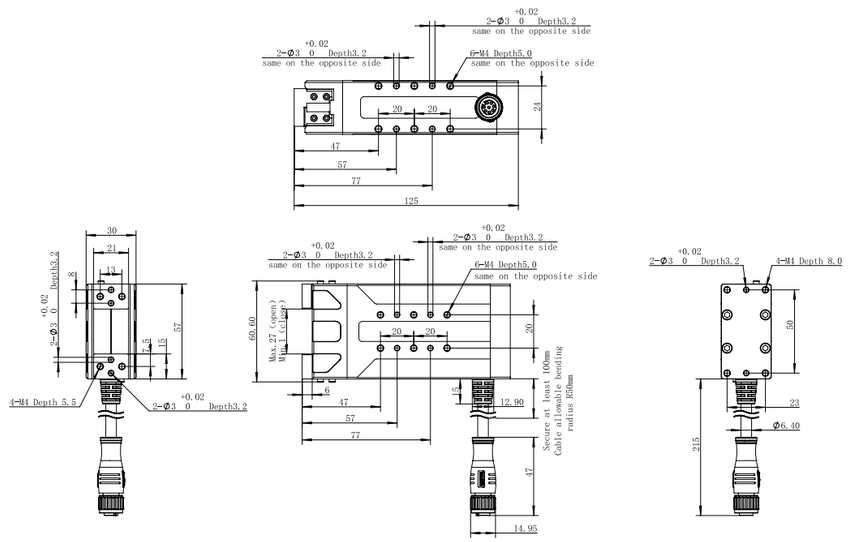
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Product Parameter	
Gripping force (per jaw)	30~100 N
Recommended workpiece weight *②	2 kg
Stroke	26 mm
Full stroke opening/closing time	0.5 s/0.5 s
Repeat accuracy (position)	± 0.02 mm
Weight	0.55 kg
Size	125 mm x 57 mm x 30 mm
Noise emission	< 50 dB
Driving method	Precise planetary gears + Rack and pinion

Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.3 A(Rated)/ 1.2 A(Peak)*④
Rated power	7.2 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller · Gripping Force Adjustable · Position Adjustable · Speed Adjustable · Drop Detection · Self-locking Mechanism

Technical Drawings

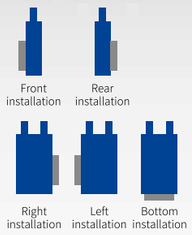


PGSE-15-7

Slim-type Electric Parallel Gripper

Cost-effective solution for replacing pneumatic gripper with electric grippe.

Cost-effective



Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection
PGSE	15	7	O	S	M1	L5	J0	F0

★①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

- **O** Without Brake
- **S** Side
- **M1** Modbus (RS485)+I/O (NN) ★①★⑤
- **M2** Modbus (RS485)+I/O (PP)
- **M3** Modbus (RS485)+I/O (NP)
- **M4** Modbus (RS485)+I/O (PN)
- **L1** 1.5m Cable
- **L3** 3m Cable
- **L5** 5m Cable
- **L10** 10m Cable
- **J0** Without Fingertip
- **F0** Without Flange

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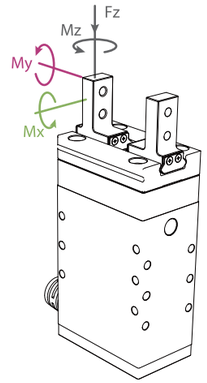
TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	70 N

Allowable Loading Moment	
Mx	0.9 N·m
My	0.75 N·m
Mz	0.9 N·m

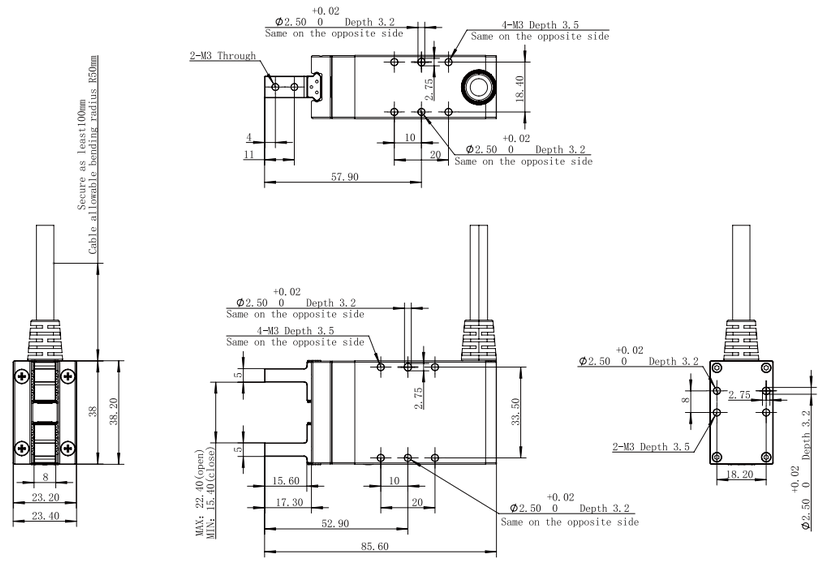
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Product Parameter	
Gripping force (per jaw)	6~15 N
Recommended workpiece weight *②	0.25 kg
Stroke	7 mm
Full stroke opening/closing time	0.15 s/0.15 s
Weight	0.15 kg
Size	85.6 mm x 38 mm x 23.2 mm
Driving method	Precise planetary gears + Rack and pinion
Noise emission	< 50 dB

Working Environment	
Communication interface	Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) *③
Rated voltage	24 V DC ± 10%
Current	0.15 A(Rated)/ 0.8 A(Peak) *④
Rated power	3.6 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Self-locking Mechanism
✓	✓	✗	✗	✗	✗

Technical Drawings



PGI

Electric Parallel Gripper

Front and rear installation

Bottom installation

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection	Robot Cable
PGI	80 140	80	W With Brake Without Brake	S Side	M1 Modbus (RS485)+I/O (NN) *①*⑤ M2 Modbus (RS485)+I/O (PP) M3 Modbus (RS485)+I/O (NP) M4 Modbus (RS485)+I/O (PN)	LX Without Extend Cable L1 1m Cable L3 3m Cable L5 5m Cable L10 10m Cable L15 15m Cable	J0 Without Fingertip J1 Standard Fingertip	F0 Without Flange F1 Standard Flange	Table Below

*①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	01 Elite CS	SIASUN	Hanwha A	DOBOT CR	02 AUBO	04 JAKA	06 ROKAE SR ROKAE ER	09 Doosan A	11 Elite EC	13 Neuromeka	15 Hanwha HCR					
	UR CB	UR E	DOBOT Nova		03 ELEPHANT	05 TECHMAN	07 DOBOT MG400	10 Doosan M	12 Han's	14 FAIRINO	16 UF x Arm	17 ROKAE CR				

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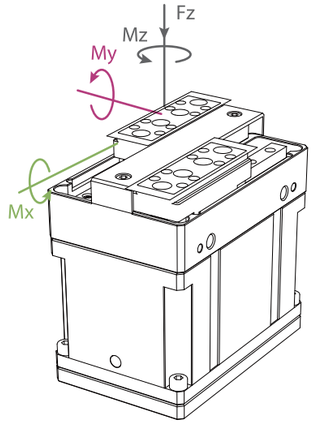
TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	300 N

Allowable Loading Moment	
Mx	7 N·m
My	7 N·m
Mz	7 N·m

Product Parameter	PGI-80-80	PGI-140-80
Gripping force (per jaw)	16~80 N	40~140 N
Recommended workpiece weight *②	1.6 kg	3 kg
Stroke	80 mm	80 mm
Full stroke opening/closing time	0.7s (80mm) 0.4s (50mm)	1.1 s/1.1 s
Repeat accuracy (position)	± 0.03 mm	
Weight	1 kg (Exclude fingers)	
Size	95 mm x 61.7 mm x 86 mm	
Noise emission	< 50 dB	
Driving method	Precise planetary gears + Rack and pinion	

Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.5 A(Rated)/ 1.2 A(Peak) *④
Rated power	12 W
IP class	IP 54
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller | Gripping Force Adjustable | Position Adjustable | Speed Adjustable | Drop Detection | Self-locking Mechanism

*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
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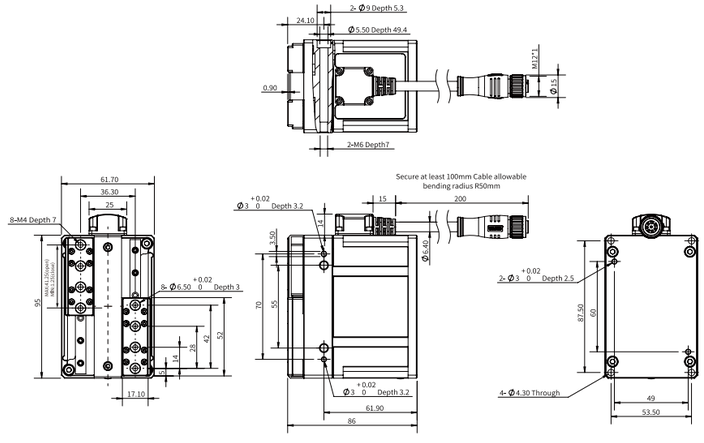
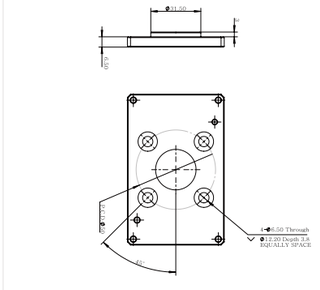
Technical Drawings





■ Conform to ISO9409-1-50-4-M6 Standard flange

*For customized flanges, we recommend designing according to the robot mounting holes, or contact us.

PGC-50-35

Electric Collaborative Parallel Gripper

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection	Robot Cable
PGC	50	35	O	S	M1	L5	J1	F1	00

Brake
- **O** Without Brake
- **S** Side

Communication Protocol *①, *⑤
- **M1** Modbus (RS485)+I/O (NN)
- **M2** Modbus (RS485)+I/O (PP)
- **M3** Modbus (RS485)+I/O (NP)
- **M4** Modbus (RS485)+I/O (PN)

Cable Selection
- **LX** Without Extend Cable
- **L1** 1m Cable
- **L3** 3m Cable
- **L5** 5m Cable
- **L10** 10m Cable

Fingertip Selection
- **J1** Standard Fingertip

Flange Selection
- **F1** Standard Flange

Robot Cable
- Table Below

*①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** Elite CS / UR CB	SIASUN / Hanwha A / UR E	DOBOT CR / DOBOT Nova	**02** AUBO	**04** JAKA	**06** ROKAE SR / ROKAE ER	**09** Doosan A	**11** Elite EC	**13** Neuromeka	**15** Hanwha HCR		
				03 ELEPHANT	**05** TECHMAN	**07** DOBOT MG400	**10** Doosan M	**12** Han's	**14** FAIRINO	**16** UF x Arm	**17** ROKAE CR	

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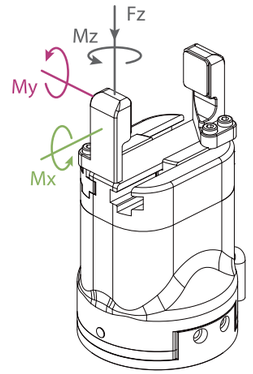
TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	150 N

Allowable Loading Moment	
Mx	2.5 N·m
My	2 N·m
Mz	3 N·m

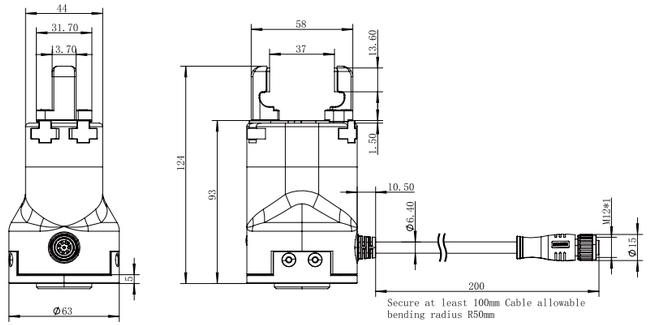
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

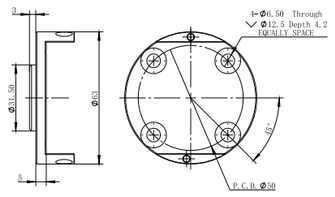
Product Parameter	
Gripping force (per jaw)	15~50 N
Recommended workpiece weight *②	1 kg
Stroke	37 mm
Full stroke opening/closing time	0.7 s/0.7 s
Repeat accuracy (position)	± 0.03 mm
Weight	0.5 kg
Size	124 mm x 63 mm x 63 mm
Noise emission	< 50 dB
Driving method	Precise planetary gears + Rack and pinion

Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional:TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.25 A(Rated)/ 0.5 A(Peak) *④
Rated power	6 W
IP class	IP 54
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

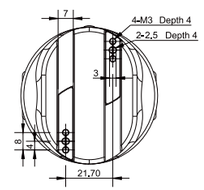
Build-in Controller · Gripping Force Adjustable · Position Adjustable · Speed Adjustable · Drop Detection · Plug & Play · Self-locking Mechanism

Technical Drawings





■ Conform to ISO 9409-1-50-4-M6 Standard flange
*For customized flanges, we recommend designing according to the robot mounting holes, or contact us.



■ Finger mounting holes

PGC-140-50

Electric Collaborative Parallel Gripper

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection	Robot Cable
PGC	140	50	W	S	M1	L5	J1	F1	00

- **W** With Brake
- **S** Side
- **M1** Modbus (RS485)+I/O (NN) *①*⑤
- **M2** Modbus (RS485)+I/O (PP)
- **M3** Modbus (RS485)+I/O (NP)
- **M4** Modbus (RS485)+I/O (PN)
- **LX** Without Extend Cable
- **L1** 1m Cable
- **L3** 3m Cable
- **L5** 5m Cable
- **L10** 10m Cable
- **J1** Standard Fingertip
- **F1** Standard Flange
- Table Below

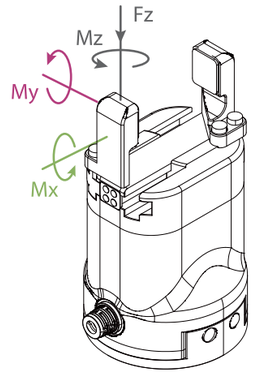
*①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** Elite CS	SIASUN	DOBOT CR	**02** AUBO	**04** JAKA	**06** ROKAE SR ROKAE ER	**09** Doosan A	**11** Elite EC	**13** Neuromeka	**15** Hanwha HCR				
	UR CB	Hanwha A	DOBOT Nova	**03** ELEPHANT	**05** TECHMAN	**07** DOBOT MG400	**10** Doosan M	**12** Han's	**14** FAIRINO	**16** UF x Arm	**17** ROKAE CR			

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.

The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	300 N

Allowable Loading Moment	
Mx	7 N·m
My	7 N·m
Mz	7 N·m

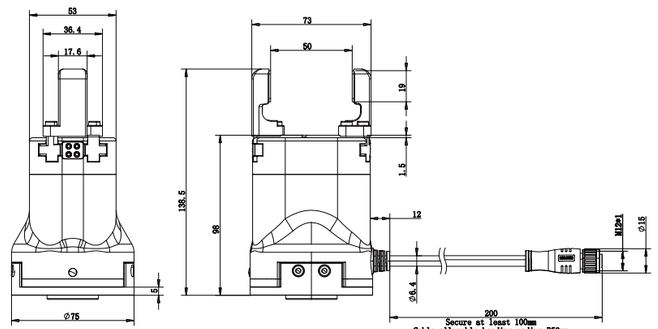
Product Parameter	
Gripping force (per jaw)	40~140 N
Recommended workpiece weight *②	3 kg
Stroke	50 mm
Full stroke opening/closing time	0.75 s/0.75s
Repeat accuracy (position)	± 0.03 mm
Weight	1 kg
Size	138.5 mm x 75 mm x 75 mm
Noise emission	< 50 dB
Driving method	Precise planetary gears + Rack and pinion

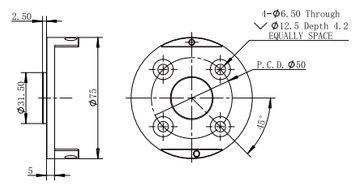
Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.4 A(Rated)/ 1.2 A(Peak) *④
Rated Power	9.6 W
IP class	IP 67
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller · Gripping Force Adjustable · Position Adjustable · Speed Adjustable · Drop Detection · Plug & Play · Self-locking Mechanism

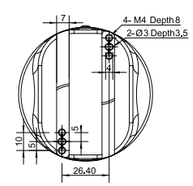
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Technical Drawings





■ Conform to ISO 9409-1-50-4-M6 Standard flange
*For customized flanges, we recommend designing according to the robot mounting holes, or contact us.



■ Finger mounting holes

PGC-300-60

Electric Collaborative Parallel Gripper

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection	Robot Cable
PGC	300	60	W	S	M1	L5	J1	F1	00

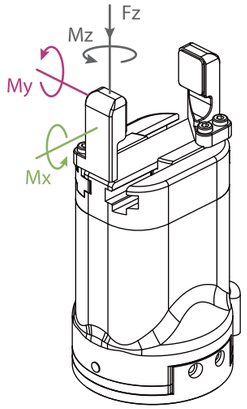
- **W** With Brake
- **S** Side
- ★①★⑤
  - **M1** Modbus (RS485)+I/O (NN)
  - **M2** Modbus (RS485)+I/O (PP)
  - **M3** Modbus (RS485)+I/O (NP)
  - **M4** Modbus (RS485)+I/O (PN)
- **LX** Without Extend Cable
- **L1** 1m Cable
- **L3** 3m Cable
- **L5** 5m Cable
- **L10** 10m Cable
- **J1** Standard Fingertip
- **F1** Standard Flange
- Table Below

★①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** Elite CS UR CB	SIASUN Hanwha A UR E	DOBOT CR DOBOT Nova	**02** AUBO	**04** JAKA	**06** ROKAE SR ROKAE ER	**09** Doosan A	**11** Elite EC	**13** Neuromeka	**15** Hanwha HCR				
				03 ELEPHANT	**05** TECHMAN	**07** DOBOT MG400	**10** Doosan M	**12** Han's	**14** FAIRINO	**16** UF x Arm	**17** ROKAE CR			

★⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	600 N
Allowable Loading Moment	
Mx	15 N·m
My	15 N·m
Mz	15 N·m

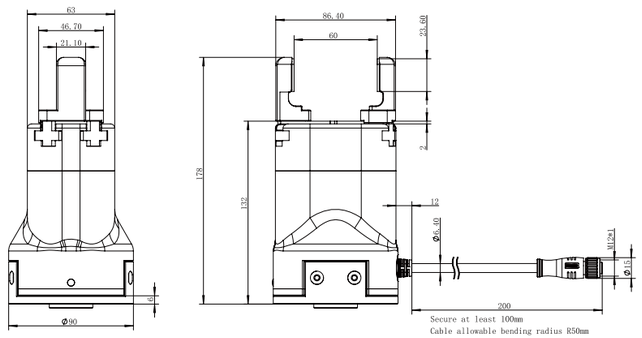
Product Parameter	
Gripping force (per jaw)	80~300 N
Recommended workpiece weight*②	6 kg
Stroke	60 mm
Full stroke opening/closing time	0.8 s/0.8 s
Repeat accuracy (position)	± 0.03 mm
Weight	1.5 kg
Size	178 mm x 90 mm x 90 mm
Noise emission	< 50 dB
Driving method	Precise planetary gears + Rack and pinion

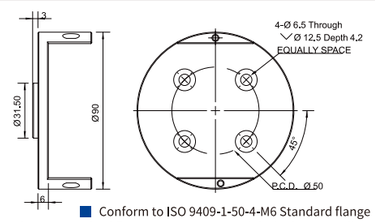
Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.4 A(Rated)/ 2 A(Peak)*④
Rated power	9.6 W
IP class	IP 67
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller · Gripping Force Adjustable · Position Adjustable · Speed Adjustable · Drop Detection · Plug & Play · Self-locking Mechanism

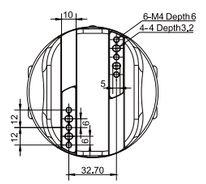
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Technical Drawings





■ Conform to ISO 9409-1-50-4-M6 Standard flange
*For customized flanges, we recommend designing according to the robot mounting holes, or contact us.



■ Finger mounting holes

PGHL-400-80

Heavy-Load Long-Stroke Electric Parallel Gripper

Bottom installation

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection
PGHL	400	80	W	S	M1	L5	J0	F0

Brake	
W	With Brake

Cable Direction	
S	Side

Communication Protocol	
M1	Modbus (RS485)+I/O (NN)
M2	Modbus (RS485)+I/O (PP)
M3	Modbus (RS485)+I/O (NP)
M4	Modbus (RS485)+I/O (PN)

*①、*⑤

Cable Selection	
LX	Without Extend Cable
L1	1m Cable
L3	3m Cable
L5	5m Cable
L10	10m Cable
L15	15m Cable

Fingertip Selection	
J0	Without Fingertip

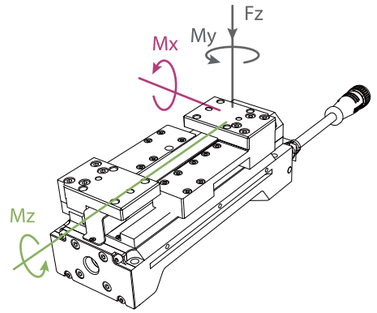
Flange Selection	
F0	Without Flange

*①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.

The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	1000 N

Allowable Loading Moment	
Mx	50 N·m
My	50 N·m
Mz	15 N·m

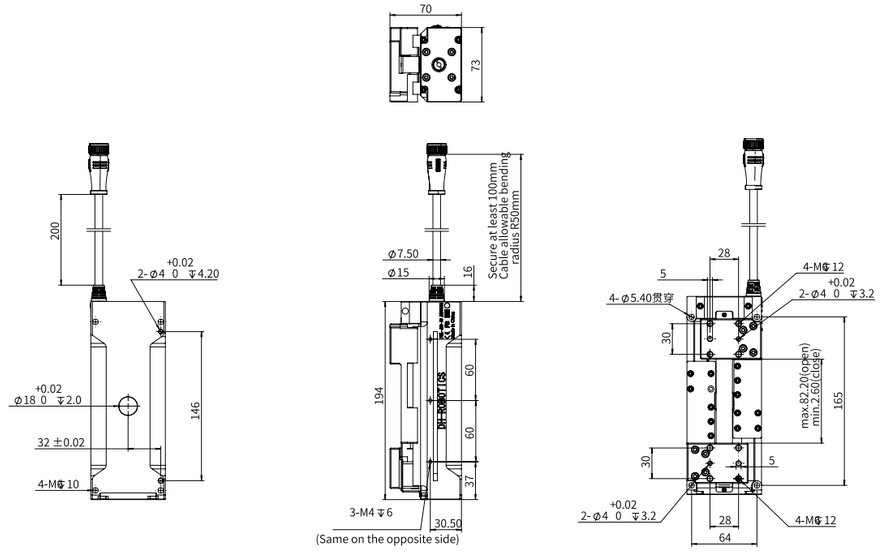
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Product Parameter	
Gripping force (per jaw)	140~400 N
Recommended workpiece weight *②	8 kg
Stroke	80 mm
Full stroke opening/closing time	1.0 s/1.1 s
Repeat accuracy (position)	± 0.02 mm
Weight	2.2 kg
Size	194 mm x 73 mm x 70 mm
Noise emission	< 60 dB
Driving method	Precise planetary gears+ Tshaped lead screw+Rack and pinion

Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	1 A(Rated)/ 3 A(Peak) *④
Rated power	24 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Self-locking Mechanism
✓	✓	✓	✓	✓	✓

Technical Drawings



Electric Rotary Grippers

RGI / RGD Series

Serie	Gripping Force (Per Jaw)	Recommended Workpiece Weight	Stroke	Reference Page
RGI-100-14/22/30	30~100 N	1.5 kg	14/22/30 mm	P37-38
RGIC-35-12	13-35 N	0.5 kg	12 mm	P39-40
RGIC-100-35	40~100 N	1 kg	35 mm	P41-42
RGD-5-14	2~5.5 N	0.05 kg	14 mm	P43-44
RGD-35-14/30	10~35 N	0.35 kg	14/30 mm	P45-46

Product Features

DH-Robotics offers industrial Electric Rotary Gripper , including the RGI and RGD series. The RGI is the market's first fully independently developed infinite rotary gripper, overcoming the challenges of wiring and power supply, with a compact and precise structure. The RGD direct-drive rotary electric gripper adopts a zero-backlash rotary module, improving rotational accuracy and making it perfectly suitable for high-precision manufacturing scenarios.

RGI Series

Gripping & Infinite Rotation

The unique structural design in the industry can realize the simultane ous griping and infinite rotation on one electric gripper, and solve the winding problem in non-standard design and rotation.

Compact Double Servo System

Dual servo systems are creatively integrated in a thin machine body, which is compact in design and can be adapted to many industrial scenes.

High Gripping Force and Torque

The maximum single-sided gripping force is **100N**, and the maximum torque is **1.5N·m.** Though precise force control and position control, the RGI gripper can more stably complete the grasping and rotating tasks.

RGD Series

Zero Rotary Backlash High Repeatability

The RGD series adopts direct-drive rotary motors to realize zero rotary backlash and a rotary resolution of up to 0.01°, which applies to rotary positioning scenarios in semiconduc tor production.

High Dynamic Response High-speed Stability

The precision direct-drive technology, coupled with DH-Robotics' excellent drive control, realizes perfect control of gripping and rotation. The rotation speed is up to **1500°** per second.

All-in-one Design Power-off Protection

The gripper adopts the design of integrating the dual servo system of gripping and rotation with the drive control module, which is smaller and more compact, and applies to more scenarios. Brakes are optional to meet the require ments of various applications.

Application

In the field of medical automation, the RGI-100 series electric grippers come standard with fingertip modules, which can be adapted to 10-in-1 and 20-in-1 size test tubes. They support the processing, opening and closing, and barcode scanning of samples such as reagents, blood samples, and nucleic acids, meeting the needs of large-scale nucleic acid sampling. The RGD grippers adopt direct drive technology, which greatly improves the rotation accuracy and is widely used in high-precision positioning assem-bly, handling, and correction adjustment in the fields of 3C electronics and semiconductors.

RGI-100

Electric Rotary Gripper

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection
RGI	100	14	O	S	M1	L5	J0	F0

Stroke
- 14
- 22
- 30

Brake
- O Without Brake

Cable Direction
- S Side
- B bottom

Communication Protocol ★③ ★⑤
- M1 Modbus (RS485)+I/O (NN)
- M2 Modbus (RS485)+I/O (PP)
- M3 Modbus (RS485)+I/O (NP)
- M4 Modbus (RS485)+I/O (PN)

Cable Selection
- LX Without Extend Cable
- L1 1m Cable
- L3 3m Cable
- L5 5m Cable
- L10 10m Cable

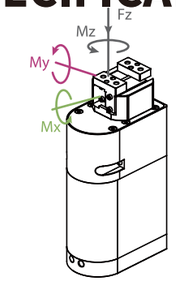
Fingertip Selection
- J0 Without Fingertip
- J1 Standard Fingertip

Flange Selection
- F0 Without Flange

★①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	RGI-100-14	RGI-100-22	RGI-100-30
Fz	150 N	200 N	150 N

Allowable Loading Moment			
Mx	2.5 N·m	3.5 N·m	3.5 N·m
My	3 N·m	4 N·m	4 N·m
Mz	4 N·m	5.5 N·m	5.5 N·m

✓ Build-in Controller	✓ Gripping Force Adjustable	✓ Position Adjustable	✓ Speed Adjustable
✓ Drop Detection	✓ Rotary Adjustable	✗ Self-locking Mechanism	

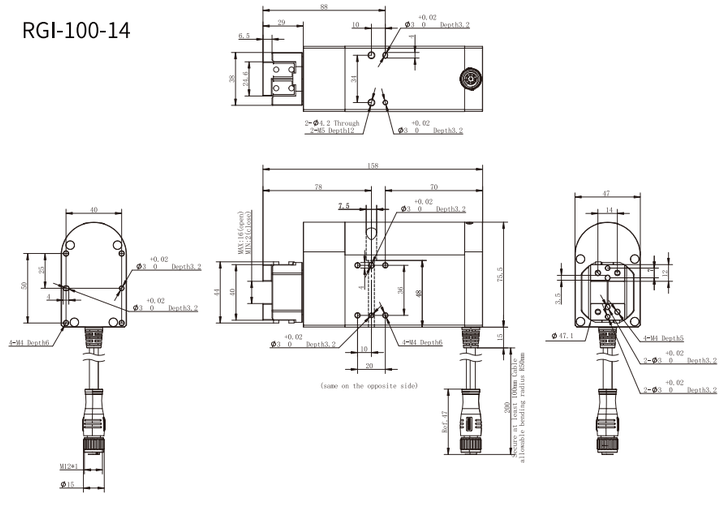
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Product Parameter	RGI-100-14	RGI-100-22	RGI-100-30
Gripping force (per jaw)	30~100 N	30~100 N	30~100 N
Recommended workpiece weight(Fingertip included) *②	1.5 kg	1.5 kg	1.5 kg
Stroke	14 mm	22 mm	30 mm
Full stroke opening/closing time	0.45 s/0.25 s	0.5 s/0.3 s	0.55 s/0.35 s
Repeat accuracy (position)	± 0.02 mm	± 0.02 mm	± 0.02 mm
Repeat accuracy (swiveling)	± 0.05 °	± 0.05 °	± 0.05 °
Max. rotation speed	2160 °/s	2160 °/s	2160 °/s
Rated torque	0.5 N·m	0.5 N·m	0.5 N·m
Peak torque	1.5 N·m	1.5 N·m	1.5 N·m
Rotary range	Infinite Rotating	Infinite Rotating	Infinite Rotating
Weight	1.28 kg	1.4 kg	1.5 kg
Size	158 x 75.5 x 47 mm Rotaty Diameter: 47.1 mm	158 x 75.5 x 47 mm Rotaty Diameter: 67.1 mm	158 x 75.5 x 47 mm Rotaty Diameter: 84.8 mm

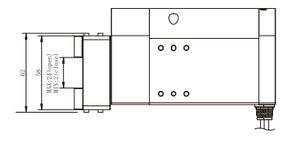
Working Environment	
Communication interface	Standard: Modbus RTU (RS485), Digital I/O(2 inputs 2 outputs) Optional: TCP/IP, CAN2.0A, PROFINET, EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	1 A(Rated)/4 A (Peak) *④
Rated power	24 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Technical Drawings

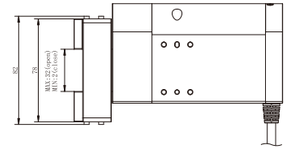
RGI-100-14



RGI-100-22



RGI-100-30



RGIC-35-12

Electric Rotary Gripper

Selection Method

Serie		Gripping Force		Stroke		Brake		Cable Direction		Communication Protocol		Cable Selection		Fingertip Selection		Flange Selection
RGIC	-	35	-	12	-	O	-	S	-	M1	-	L5	-	J0	-	F0

★①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

Brake	
O	Without Brake

Cable Direction	
S	Side
B	bottom

Communication Protocol ★①★⑤	
M1	Modbus (RS485)+I/O (NN)
M2	Modbus (RS485)+I/O (PP)
M3	Modbus (RS485)+I/O (NP)
M4	Modbus (RS485)+I/O (PN)

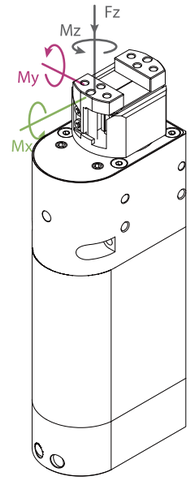
Cable Selection	
LX	Without Extend Cable
L1	1m Cable
L3	3m Cable
L5	5m Cable
L10	10m Cable

Fingertip Selection	
J0	Without Fingertip
J1	Standard Fingertip

Flange Selection	
F0	Without Flange

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	100 N

Allowable Loading Moment	
Mx	1.5 N·m
My	1.1 N·m
Mz	2.1 N·m

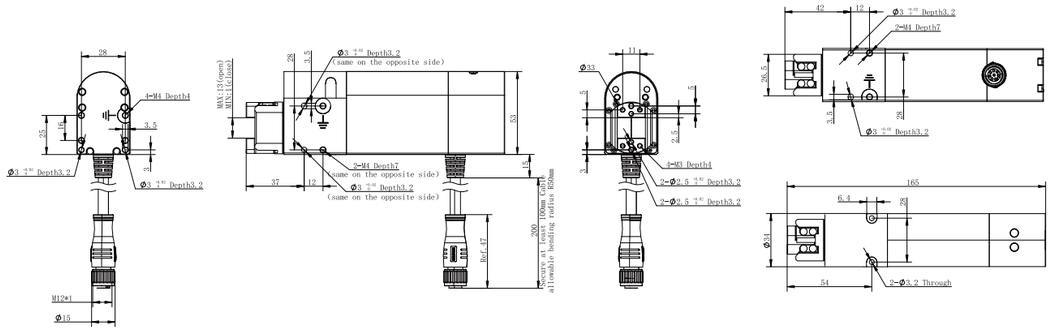
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Product Parameter	
Gripping force (per jaw)	13~35 N
Recommended workpiece weight(Fingertip included) *②	0.5 kg
Stroke	12 mm
Full stroke opening/closing time	0.5 s/0.4 s
Repeat accuracy (position)	± 0.02 mm
Rated torque	0.2 N·m
Peak torque	0.5 N·m
Rotary range	Infinite Rotating
Max. rotation speed	2160 °/s
Repeat accuracy (swiveling)	± 0.05 °
Weight	0.64 kg
Size	165 mm x 53 mm x 34 mm Rotaty Diameter:33 mm

Working Environment	
Communication interface	Standard: Modbus RTU（RS485）, Digital I/O(2 inputs 2 outputs) Optional: TCP/IP，CAN2.0A，PROFINET，EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	1.7 A(Rated)/ 2.5 A(Peak)*④
Rated power	40.8 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller | Gripping Force Adjustable | Position Adjustable | Speed Adjustable | Drop Detection | Rotary Adjustable | Self-locking Mechanism

Technical Drawings



*Product size change on January 10, 2025: Height dimension changed from 150 to 165, others remain unchanged.

RGIC-100-35

Electric Rotary Gripper

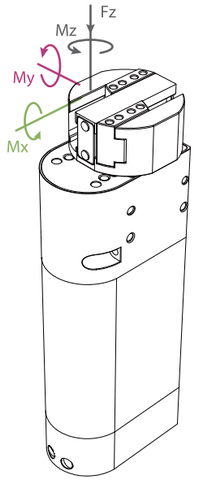
Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection
RGIC	100	35	O	S	M	L5	J0	F0

- Brake: O Without Brake
- Cable Direction: S Side; B bottom
- Communication Protocol: M Modbus (RS485) ★④
- Cable Selection: LX Without Extend Cable; L1 1m Cable; L3 3m Cable; L5 5m Cable; L10 10m Cable
- Fingertip Selection: J0 Without Fingertip; J1 Standard Fingertip
- Flange Selection: F0 Without Flange

*④ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	100 N

Allowable Loading Moment	
Mx	1.5 N·m
My	1.1 N·m
Mz	2.1 N·m

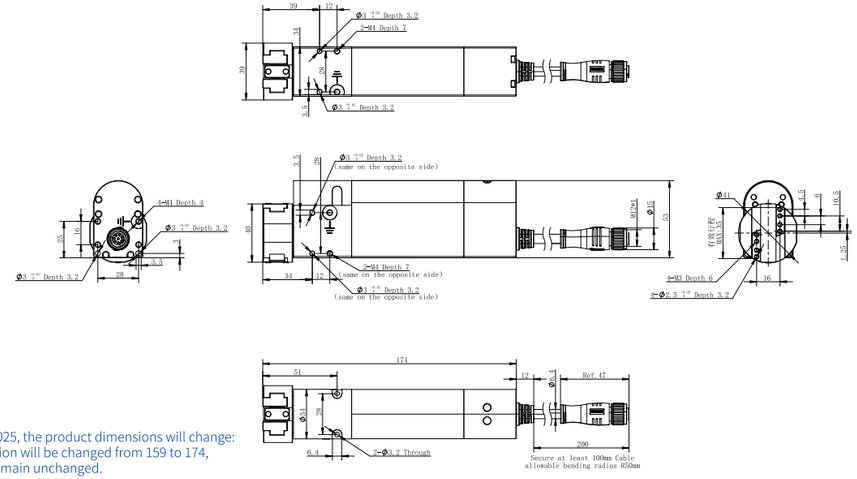
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Product Parameter	
Gripping force (per jaw)	40~100 N
Recommended workpiece weight(Fingertip included) *①	1 kg
Stroke	35 mm
Full stroke opening/closing time	0.9 s/0.9 s
Repeat accuracy (position)	± 0.02 mm
Rated torque	0.35 N·m
Peak torque	1.5 N·m
Rotary range	Infinite Rotating
Max. rotation speed	1400 °/s
Weight	0.65 kg
Size	174 mm x 53 mm x 34 mm Rotaty Diameter：41 mm

Working Environment	
Communication interface	Standard: Modbus RTU(RS485) Optinal: TCP/IP，CAN2.0A，PROFINET，EtherCAT ★②
Rated voltage	24 V DC ± 10%
Current	2 A(Rated)/ 5 A(Peak) *③
Rated power	48 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Rotary Adjustable	Self-locking Mechanism
✓	✓	✓	✓	✓	✓	✗

Technical Drawings



*On January 10, 2025, the product dimensions will change: the height dimension will be changed from 159 to 174, and the rest will remain unchanged.

RGD-5

Direct Drive Rotary Gripper

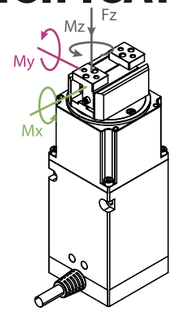
Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection
RGD	5	14	O	S	M	L5	J0	F0

- Stroke: 14
- Brake: O Without Brake; W With Brake
- Cable Direction: S Side; B bottom
- Communication Protocol: M Modbus (RS485) ★⑤
- Cable Selection: LX Without Extend Cable; L1 1m Cable; L3 3m Cable; L5 5m Cable; L10 10m Cable
- Fingertip Selection: J0 Without Fingertip; J1 Standard Fingertip
- Flange Selection: F0 Without Flange

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	150 N

Allowable Loading Moment	
Mx	2 N·m
My	1.5 N·m
Mz	2.5 N·m

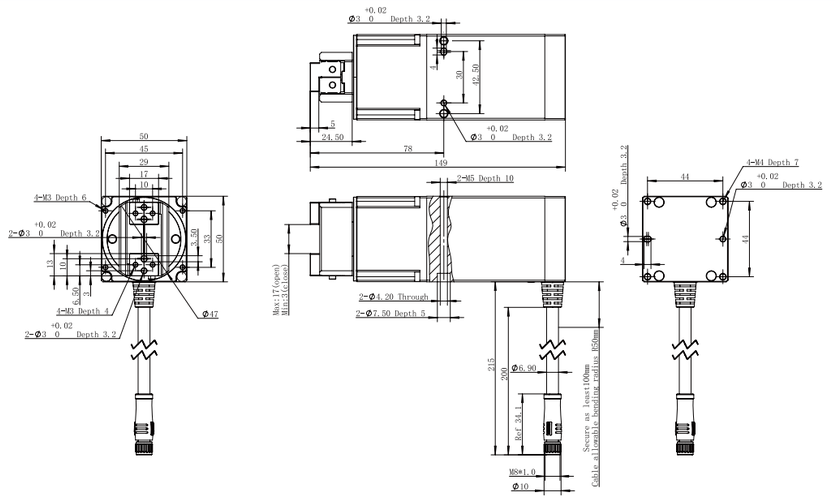
Build-in Controller ✓ | Gripping Force Adjustable ✓ | Position Adjustable ✓ | Speed Adjustable ✓
Drop Detection ✓ | Rotary Adjustable ✓ | Self-locking Mechanism (optional) |

*① The peak torque can be increased to a maximum of 0.5 N·m. For specificdetails, please consult with technical support personnel.
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Product Parameter	
Gripping force (per jaw)	2-5.5 N
Recommended workpiece weight*②	0.05 kg
Stroke	14 mm
Full stroke opening/closing time	0.5 s/0.3 s
Repeat accuracy (position)	± 0.02 mm
Repeat accuracy (swiveling)	± 0.1 °
Max. rotation speed	1500 °/s
Rated torque	0.1 N·m
Peak torque*①	0.25 N·m
Rotary backlash	Zero backlash
Rotary range	Infinite Rotating
Weight	0.86 kg(without brake) 0.88 kg(with brake)
Size	149 mm x 50 mm x 50 mm Rotaty Diameter：47 mm
Noise emission	< 60 dB

Working Environment	
Communication interface	Modbus RTU (RS485) Optional: TCP/IP、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	1.2 A(Rated)/ 2.5 A(Peak) *④
Rated power	60 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE，FCC，RoHS

Technical Drawings



Parameter Table of Rotational Time in Place for Different Inertia Loads

Reference Size/mm	Material	Weight/g	Corresponding Inertia/Kg · mm²	Actual Rotation Angle/°	Reference Correction Tme/ms
Unload	-	0	0	45	200
				90	200
				180	400
				360	500
				720	700
20*80*25	Aluminum Block	57	61	45	200
				90	300
				180	400
				360	500
				720	700
74.7*80*25	Aluminum Block	387	402	45	300
				90	350
				180	400
				360	550
				720	750
96.7*80*25	Aluminum Block	503	685	45	400
				90	450
				180	500
				360	650
				720	850
111.3*80*25	Aluminum Block	582	941	45	850
				90	1000
				180	1200
				360	1450
				720	1650
126*80*25	Aluminum Block	662	1263	45	1350
				90	1550
				180	1850
				360	1950
				720	2450

RGD-35

Direct Drive Rotary Gripper

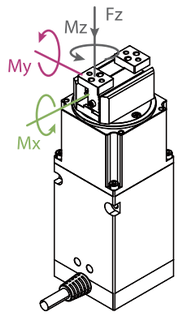
Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection
RGD	35	14	O	S	M	L5	J0	F0
		30	O Without Brake W With Brake	S Side B bottom	M Modbus (RS485) *ⓢ	LX Without Extend Cable L1 1m Cable L3 3m Cable L5 5m Cable L10 10m Cable	J0 Without Fingertip J1 Standard Fingertip	F0 Without Flange

*ⓢ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.

The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	150 N

Allowable Loading Moment	
Mx	2 N·m
My	1.5 N·m
Mz	2.5 N·m

Build-in Controller · Gripping Force Adjustable · Position Adjustable · Speed Adjustable · Drop Detection · Rotary Adjustable · Self-locking Mechanism (optional)

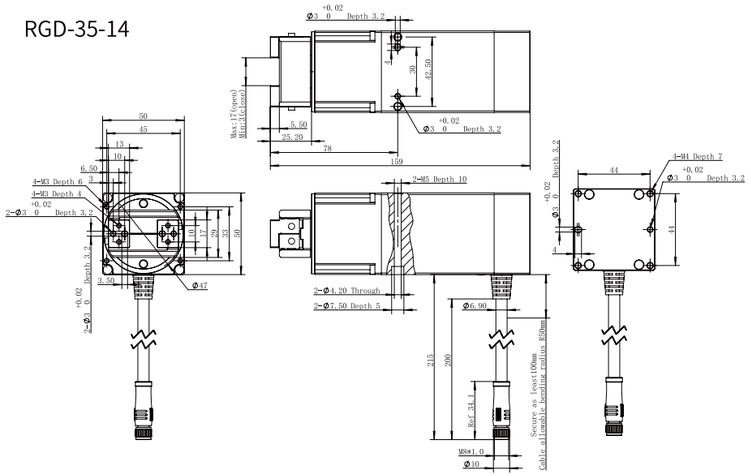
*① The peak torque can be increased to a maximum of 0.5 N·m. For specificdetails, please consult with technical support personnel.
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Product Parameter	RGD-35-14	RGD-35-30
Gripping force (per jaw)	10-35 N	10-35 N
Recommended workpiece weight(Fingertip included) *②	0.35 kg	0.35 kg
Stroke	14 mm	30 mm
Full stroke opening/closing time	0.5 s/0.5 s	0.7 s/0.7 s
Repeat accuracy (position)	± 0.02 mm	± 0.02 mm
Repeat accuracy (swiveling)	± 0.1 °	± 0.1 °
Max. rotation speed	1500 °/s	1500 °/s
Rated torque	0.1 N·m	0.1 N·m
Peak torque* ①	0.25 N·m	0.25 N·m
Rotary backlash	Zero backlash	Zero backlash
Rotary range	Infinite Rotating	Infinite Rotating
Weight	0.86 kg(without brake) 0.88 kg(with brake)	1 kg(without brake) 1.02 kg(with brake)
Size	159 mm x 50 mm x 50 mm Rotaty Diameter：47 mm	159 mm x 50 mm x 50 mm Rotaty Diameter：83.6 mm
Noise emission	< 60 dB	< 60 dB

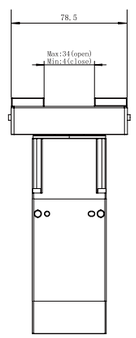
Working Environment	
Communication interface	Modbus RTU (RS485) Optional：：TCP/IP、EtherCAT*③
Rated voltage	24 V DC ± 10%
Current	1.2 A(Rated)/ 2.5 A(Peak) *④
Rated power	60 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE，FCC，RoHS

Technical Drawings

RGD-35-14



RGD-35-30



Parameter Table of Rotational Time in Place for Different Inertia Loads

Reference Size/mm	Material	Weight/g	Corresponding Inertia/Kg · mm²	Actual Rotation Angle/°	Reference Correction Tme/ms
Unload	-	0	0	45	200
				90	200
				180	400
				360	500
				720	700
20*80*25	Aluminum Block	57	61	45	200
				90	300
				180	400
				360	500
				720	700
74.7*80*25	Aluminum Block	387	402	45	300
				90	350
				180	400
				360	550
				720	750
96.7*80*25	Aluminum Block	503	685	45	400
				90	450
				180	500
				360	650
				720	850
111.3*80*25	Aluminum Block	582	941	45	850
				90	1000
				180	1200
				360	1450
				720	1650
126*80*25	Aluminum Block	662	1263	45	1350
				90	1550
				180	1850
				360	1950
				720	2450

Articulated Electric Grippers

AG / DH Series

ARTICULATED ELECTRIC GRIPPER

Serie	Gripping Force (Per Jaw)	Recommended workpiece weight	Stroke	Reference Page
AG-160-95	45~160 N	3 kg	95 mm	P51-52
AG-105-145	35~105 N	2 kg	145 mm	P53-54
DH-3	10~65 N	1.8 kg	106 mm (parallel) 122 mm (centric)	P55-56
DH-5	2~5.5 N	0.05 kg	14 mm	P57-58

Product Features

The AG series is a linkage-type adaptive electric gripper which is independently developed by DH-Robotics. With Plug& Play software many and exquisite structural design , AG series is a perfect solution to be applied with collabrative robots to grip work-pieces with different shapes in different industries.

Envelope Adaptive Capture

The gripper linkage mecha nism supports envelope adaptive grasping, which is more stable to grip round,spherical or special-shaped objects.

Plug & Play

It supports plug & play with most collaborative robot brands on the market which is easier to control and program.

Long Stroke

The biggest stroke of the AG series is up to 145 mm. One gripper can meet the grasping needs of objects of different sizes with good compatibility.

Application

Cooperate with collaborative robot or industrial robot to complete material handling, loading and unloading, assembly, testing, sorting and other tasks in auto parts, automation equip ment, new energy and other industries.

AG-160-95

Electric Adaptive Gripper

Selection Method

Serie		Gripping Force		Stroke		Brake		Cable Direction		Communication Protocol		Cable Selection		Fingertip Selection		Flange Selection		Robot Cable
AG	-	160	-	95	-	W	-	S	-	M1	-	L5	-	J1	-	F1	-	00

W Self-locking

S Side

*① *⑤

M1	Modbus (RS485)+I/O (NN)
M2	Modbus (RS485)+I/O (PP)
M3	Modbus (RS485)+I/O (NP)
M4	Modbus (RS485)+I/O (PN)

LX	Without Extend Cable
L1	1m Cable
L3	3m Cable
L5	5m Cable
L10	10m Cable

J1 Standard Fingertip

F1 Without Flange

Table Below

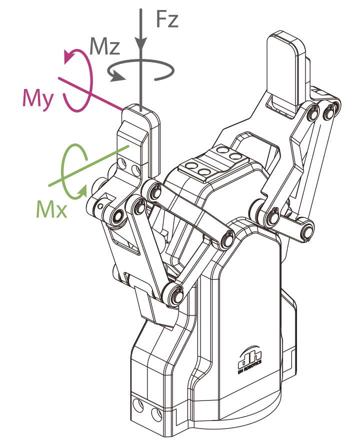
①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** Elite CS, UR CB, SIASUN, Hanwha A, UR E, DOBOT CR, DOBOT Nova	**02** AUBO	**04** JAKA	**06** ROKAE SR, ROKAE ER	**09** Doosan A	**11** Elite EC	**13** Neuromeka	**15** Hanwha HCR
		03 ELEPHANT	**05** TECHMAN	**07** DOBOT MG400	**10** Doosan M	**12** Han's	**14** FAIRINO	**16** UF x Arm, **17** ROKAE CR

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur.
If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.

The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	300 N

Allowable Loading Moment	
Mx	4.75 N·m
My	4.75 N·m
Mz	4.75 N·m

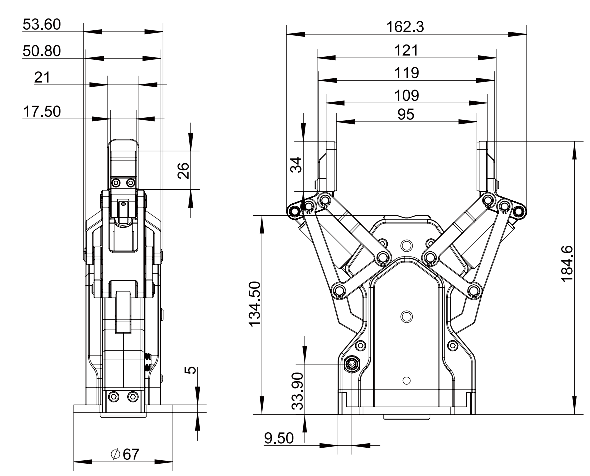
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

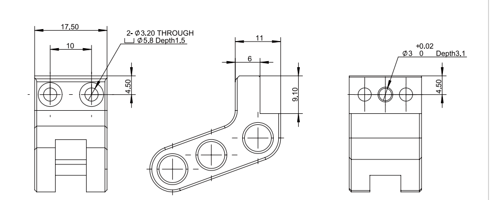
Product Parameter	
Gripping force (per jaw)	45~160 N
Recommended workpiece weight *②	3 kg
Stroke	95 mm
Full stroke opening/closing time	0.9 s/0.9 s
Repeat accuracy (position)	± 0.03 mm
Weight	1 kg
Size	184.6 mm x 162.3 mm x 67 mm
Noise emission	< 60 dB
Driving method	Screw drive + Linkage system

Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.8 A(Rated)/ 1.5 A(Peak) *④
Rated power	19.2 W
IP class	IP 54
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

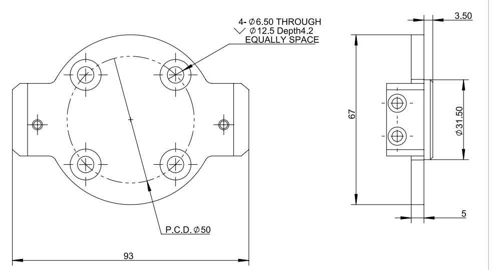
Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Plug & Play	Self-locking Mechanism
✓	✓	✓	✗	✓	✓	✓

Technical Drawings





■ Customized finger installation size



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

Electric Parallel Gripper
Electric Rotary Gripper
Articulated Electric Gripper
Electric Centric Gripper

AG-105-145

Electric Adaptive Gripper

Selection Method

Serie		Gripping Force		Stroke		Brake		Cable Direction		Communication Protocol		Cable Selection		Fingertip Selection		Flange Selection		Robot Cable
AG	-	105	-	145	-	W	-	S	-	M1	-	L5	-	J1	-	F1	-	00

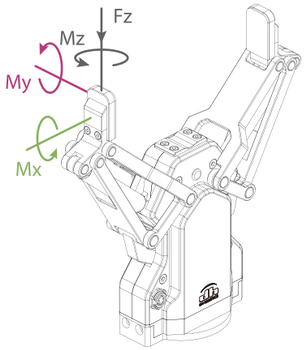
- Brake: **W** Self-locking
- Cable Direction: **S** Side
- Communication Protocol (★① ★⑤): **M1** Modbus (RS485)+I/O (NN); **M2** Modbus (RS485)+I/O (PP); **M3** Modbus (RS485)+I/O (NP); **M4** Modbus (RS485)+I/O (PN)
- Cable Selection: **LX** Without Extend Cable; **L1** 1m Cable; **L3** 3m Cable; **L5** 5m Cable; **L10** 10m Cable
- Fingertip Selection: **J1** Standard Fingertip
- Flange Selection: **F1** Standard Flange
- Robot Cable: Table Below

★①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** Elite CS UR CB	SIASUN Hanwha A UR E	DOBOT CR DOBOT Nova	**02** AUBO	**04** JAKA	**06** ROKAE SR ROKAE ER	**09** Doosan A	**11** Elite EC	**13** Neuromeka	**15** Hanwha HCR	**03** ELEPHANT	**05** TECHMAN	**07** DOBOT MG400	**10** Doosan M	**12** Han's	**14** FAIRINO	**16** UF x Arm	**17** ROKAE CR

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur.
If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	300 N

Allowable Loading Moment	
Mx	1.95 N·m
My	1.95 N·m
Mz	1.95 N·m

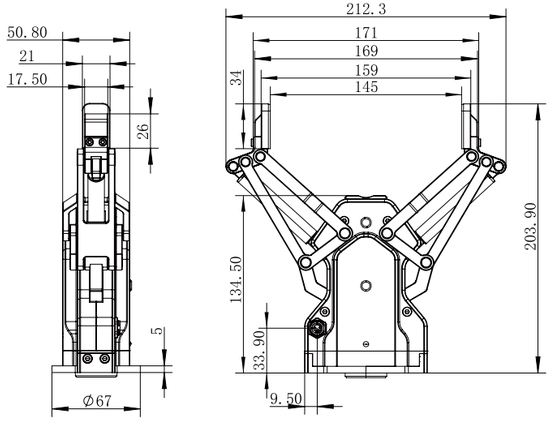
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

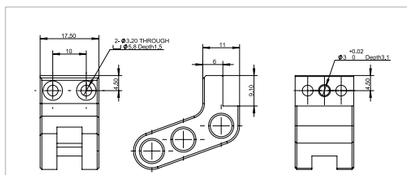
Product Parameter	
Gripping force (per jaw)	35~105 N
Recommended workpiece weight *②	2 kg
Stroke	145 mm
Full stroke opening/closing time	0.9 s/0.9 s
Repeat accuracy (position)	± 0.03 mm
Weight	1.3 kg
Size	203.9 mm x 212.3 mm x 67 mm
Noise emission	< 60 dB
Driving method	Screw drive + Linkage system

Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.8 A(Rated)/ 1.5 A(Peak) *④
Rated power	19.2 W
IP class	IP 54
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

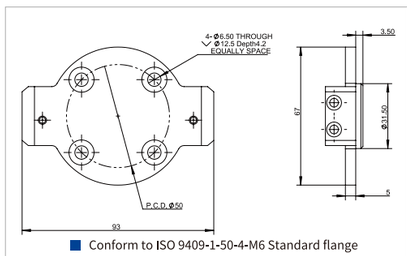
Build-in Controller · Gripping Force Adjustable · Position Adjustable · Speed Adjustable · Drop Detection · Plug & Play · Self-locking Mechanism

Technical Drawings





■ Customized finger installation size



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

DH-3

Electric Adaptive Gripper

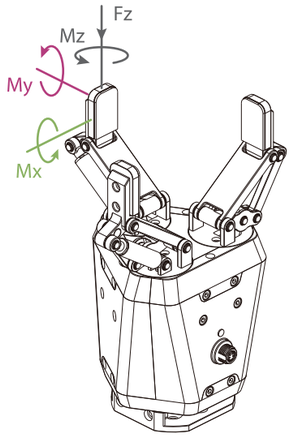
Bottom installation

Selection Method

Serie	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection
DH-3	W	S	T	L5	J1	F1

- **W** Self-locking
- **S** Side
- **T** TCP/IP
- **E** EtherCAT
- **LX** Without Extend Cable
- **L1** 1m Cable
- **L3** 3m Cable
- **L5** 5m Cable
- **L10** 10m Cable
- **J1** Standard Fingertip
- **F1** Standard Flange

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	150 N
Allowable Loading Moment	
Mx	2.5 N·m
My	2 N·m
Mz	3 N·m

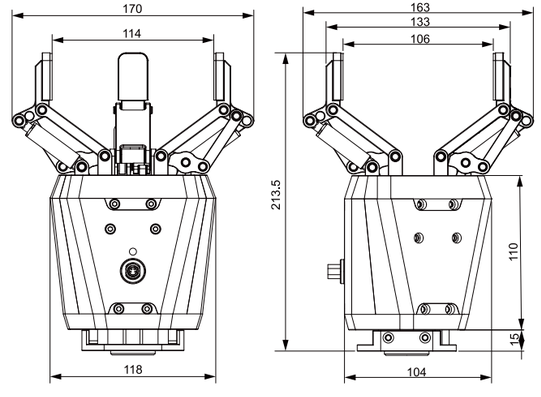
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

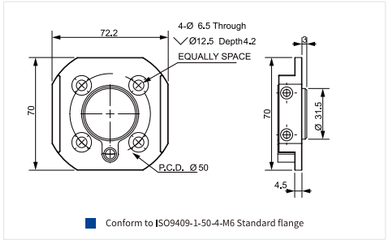
Product Parameter		
Gripping force (per jaw)		10~65 N
Recommended workpiece weight *①		1.8 kg
Stroke	106 mm (parallel)	122 mm (centric)
Full stroke opening/closing time		0.7 s/0.7 s
Repeat accuracy (position)		± 0.03 mm
Weight		1.68 kg
Size		213.5 mm x 170 mm x 118 mm
Noise emission		< 60 dB
Driving method		Screw nut + gear driv + linkage mechanism

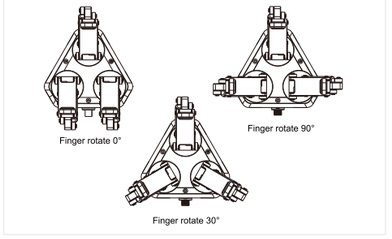
Working Environment	
Communication interface	Standard: TCP/IP, USB2.0, CAN2.0A Optional: EtherCAT *②
Rated voltage	24 V DC ± 10%
Current	0.5 A(Rated)/ 1 A(Peak) *③
Rated power	12 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Plug & Play	Self-locking Mechanism
✓	✓	✓	✗	✗	✓	✓

Technical Drawings

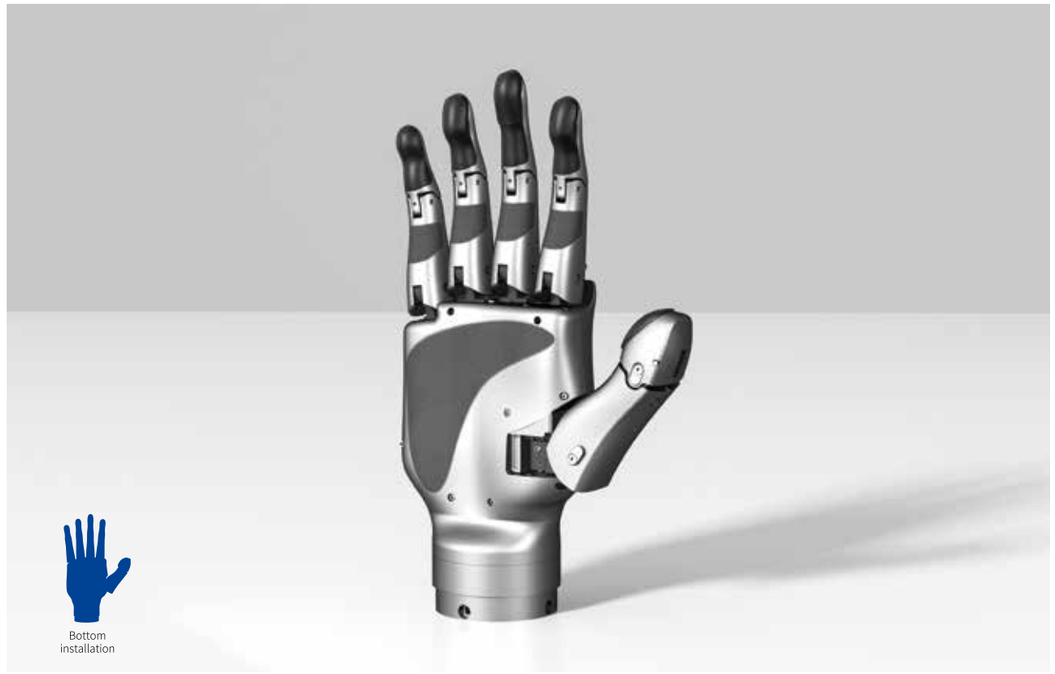






DH-5

Dexterous Hand

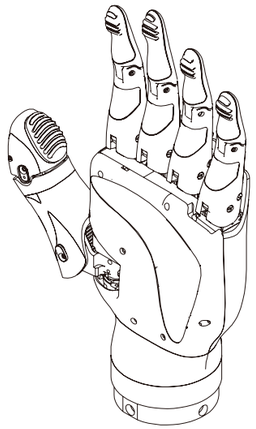


Selection Method

Serie	Hand Shape	Degrees of Freedom	Grip Strength	Wrist Interface	Cable Direction
DH-5	L	11	10	N	M1

- **L** left hand
- **R** right hand
- **11** Degrees of freedom
- **10** 10 N
- **30** 30 N
- **N** Standard interface
- **F** Quick-release interface
- **M1** EtherCAT
- **M2** Modbu
- **M3** Modbus-RTU
- **M4** CANFD

TECHNICAL SPECIFICATIONS

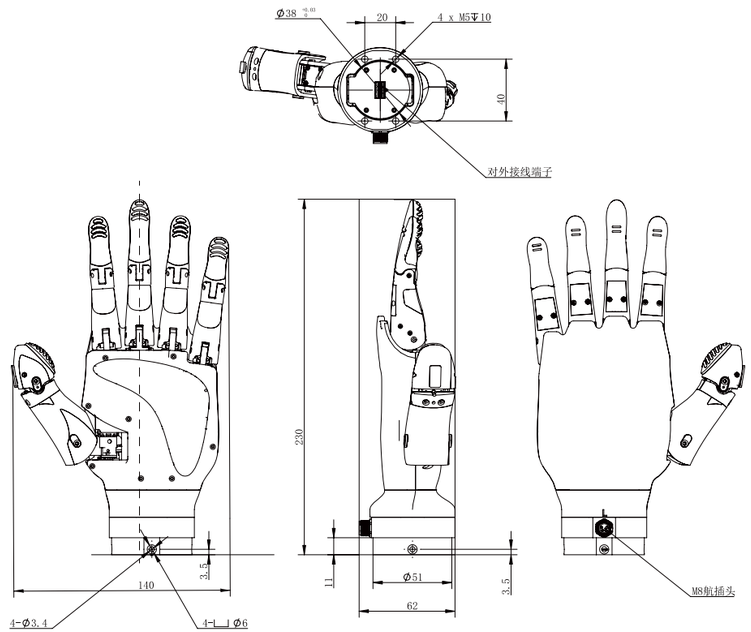


Build-in Controller · Gripping Force Adjustable · Position Adjustable · Speed Adjustable

Drop Detection · Plug & Play · Self-locking Mechanism

Product Parameter	
Degrees of freedom	11
Active degree of freedom	6
Working speed	1.0 s
Four-finger bending angle	80°+90°
Thumb bending angle	30°+15°
Thumb lateral swing angle	70°
Single fingertip force	10 N
Recommended maximum friction load	2 kg
Recommended maximum structural lifting load	4 kg
Hand grip strength	30 N
Lifting load	10 kg
Weight	700 g
Driving method	Coreless Motor +Planetary Reducer +Screw + Connecting Rod
Size	Adult Hand Size（230 mm*85 mm*51 mm）
Working Environment	
Communication interface	Modbus-RTU/CAN
Rated voltage	24 V DC ± 10%

Technical Drawings



Electric Centric Grippers

CGE / CGI / CGC Series

ELECTRIC CENTRIC GRIPPER

Serie	Gripping Force (Per Jaw)	Recommended Workpiece Weight	Stroke	Reference Page
CGE-10-10	3~10 N	0.1 kg	10 mm	P61-62
CGI-100-170	30~100 N	1.5 kg	Φ40~Φ170 mm	P63-64
CGC-80-10	20~80 N	1.5 kg	10 mm	P65-66

Product Features

The CG series is a three-finger centric gripper independently developed by DH-Robotics. The three-finger gripping method can better cope with the grasping task of cylindrical workpieces.The CG series is avail able in a variety of models for a variety of scenarios, stroke and end devices.

High Performance

Realize high-precision centering and grasping, the process structure meets the requirements of high rigidity, and the energy density exceeds that of similar products.

Long Lifetime

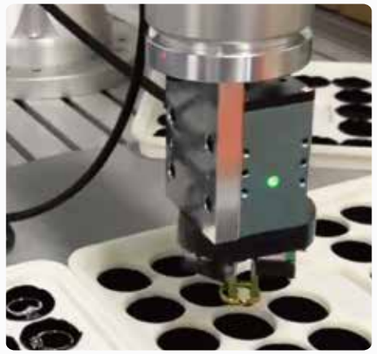
Continuous and stable work above 10 millions times without maintenance.

Overload Protection

The high-performance servo motor can provide instanta neous overload protection.

Application

Accurate and stable grasping of cylindrical workpieces in the fields of auto parts, auto-mation equipment, precision machining and assembly, etc.



CGE-10-10

Electric Centric Gripper

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection	Robot Cable
CGE	10	10	O	S	M1	L5	J0	F0	00

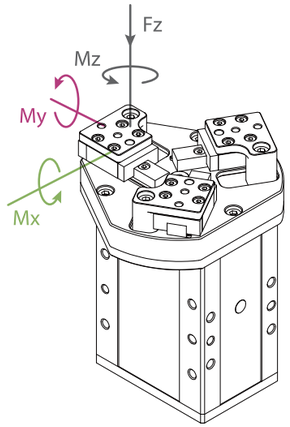
- Brake: **O** Without Brake
- Cable Direction: **S** Side
- Communication Protocol (*①, *⑤): **M1** Modbus (RS485)+I/O (NN); **M2** Modbus (RS485)+I/O (PP); **M3** Modbus (RS485)+I/O (NP); **M4** Modbus (RS485)+I/O (PN)
- Cable Selection: **LX** Without Extend Cable; **L1** 1m Cable; **L3** 3m Cable; **L5** 5m Cable; **L10** 10m Cable
- Fingertip Selection: **J0** Without Fingertip
- Flange Selection: **F0** Without Flange
- Robot Cable: Table Below

*①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** Elite CS UR CB	SIASUN Hanwha A UR E	DOBOT CR DOBOT Nova	**02** AUBO	**04** JAKA	**06** ROKAE SR ROKAE ER	**09** Doosan A	**11** Elite EC	**13** Neuromeka	**15** Hanwha HCR		
				03 ELEPHANT	**05** TECHMAN	**07** DOBOT MG400	**10** Doosan M	**12** Han's	**14** FAIRINO	**16** UF x Arm	**17** ROKAE CR	

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur.
If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	150 N

Allowable Loading Moment	
Mx	0.62 N·m
My	0.62 N·m
Mz	0.62 N·m

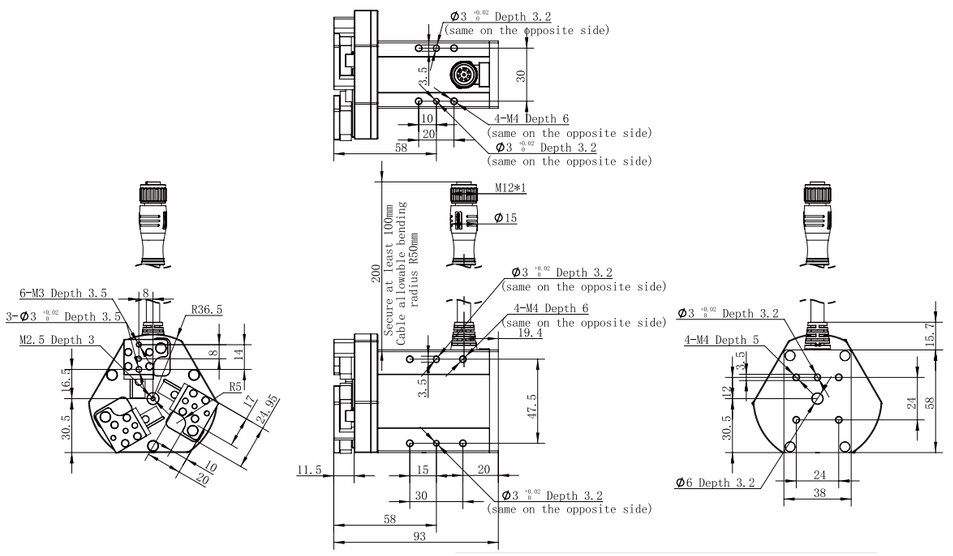
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

Product Parameter	
Gripping force (per jaw)	3~10 N
Recommended workpiece weight *②	0.1 kg
Stroke	10 mm
Full stroke opening/closing time	0.3 s/0.3 s
Repeat accuracy (position)	± 0.03 mm
Weight	0.43 kg
Size	94 mm x 53.5 mm x 38 mm
Noise emission	< 50 dB
Driving method	Precise planetary gear reducer + Rack and pinion

Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional:TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.3 A(Rated)/ 0.6 A(Peak) *④
Rated power	7.2 W
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller · Gripping Force Adjustable · Position Adjustable · Speed Adjustable · Drop Detection · Self-locking Mechanism

Technical Drawings



CGI-100-170

Electric Centric Gripper

Selection Method

Serie		Gripping Force		Stroke		Brake		Cable Direction		Communication Protocol		Cable Selection		Fingertip Selection		Flange Selection		Robot Cable
CGI	-	100	-	170	-	O	-	S	-	M1	-	L5	-	J1	-	F1	-	00

Brake
- O Without Brake
- W With Brake

Cable Direction
- S Side

Communication Protocol *① *⑤
- M1 Modbus (RS485)+I/O (NN)
- M2 Modbus (RS485)+I/O (PP)
- M3 Modbus (RS485)+I/O (NP)
- M4 Modbus (RS485)+I/O (PN)

Cable Selection
- LX Without Extend Cable
- L1 1m Cable
- L3 3m Cable
- L5 5m Cable
- L10 10m Cable

Fingertip Selection
- J1 Standard Fingertip

Flange Selection
- F1 Standard Fingertip

Robot Cable
- Table Below

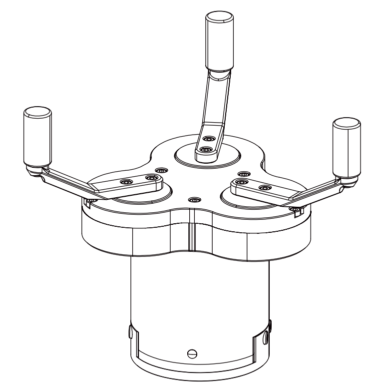
*①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** Elite CS, UR CB, SIASUN, Hanwha A, UR E, DOBOT CR, DOBOT Nova	**02** AUBO	**04** JAKA	**06** ROKAE SR ROKAE ER	**09** Doosan A	**11** Elite EC	**13** Neuromeka		**15** Hanwha HCR	
		03 ELEPHANT	**05** TECHMAN	**07** DOBOT MG400	**10** Doosan M	**12** Han's	**14** FAIRINO	**16** UF x Arm	**17** ROKAE CR	

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur.
If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.

The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



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.

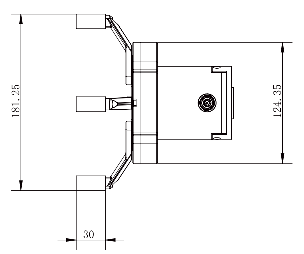
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

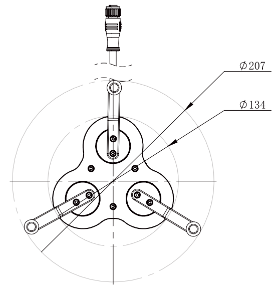
Product Parameter	
Gripping force (per jaw)	30~100 N
Recommended workpiece weight *②	1.5 kg
Recommended workpiece diameter (inward)	Φ40~Φ170 mm
Full stroke opening/closing time	1.35 s
Repeat accuracy (position)	± 0.03 mm
Weight	1.5 kg
Size	158.4 mm x 124.35 mm x 116 mm (without brake/with brake, same size)
Noise emission	< 50 dB
Driving method	Precise planetary gears + Rack and pinion

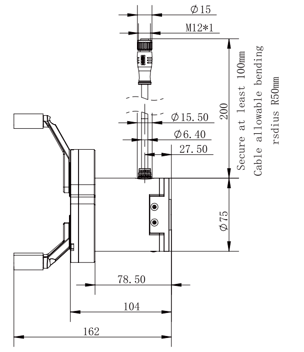
Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.4 A(Rated)/ 1 A(Peak) *④
Rated power	9.6 W
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

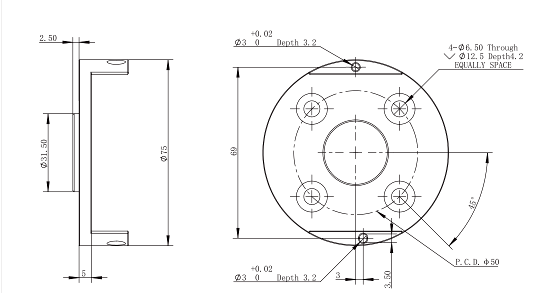
Build-in Controller | Gripping Force Adjustable | Position Adjustable | Speed Adjustable | Drop Detection | Self-locking Mechanism

Technical Drawings









■ Conform to ISO9409-1-50-4-M6 Standard flange
*For customized flanges, we recommend designing according to the robot mounting holes, or contact us.

CGC-80-10

Electric Collaborative Centric Gripper

Bottom installation

Selection Method

Serie	Gripping Force	Stroke	Brake	Cable Direction	Communication Protocol	Cable Selection	Fingertip Selection	Flange Selection	Robot Cable
CGC	80	10	W	S	M1	L5	J1	F1	00

W With Brake

S Side

M1 Modbus (RS485)+I/O (NN) *① *⑤
M2 Modbus (RS485)+I/O (PP)
M3 Modbus (RS485)+I/O (NP)
M4 Modbus (RS485)+I/O (PN)

LX Without Extend Cable
L1 1m Cable
L3 3m Cable
L5 5m Cable
L10 10m Cable

J1 Standard Fingertip

F1 Standard Flange

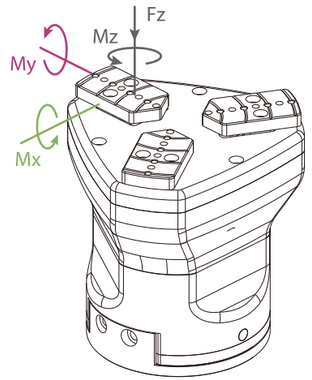
Table Below

*①:
I/O(NN): NPN/NPN
I/O(PP): PNP/PNP
I/O(NP): NPN/PNP
I/O(PN): PNP/NPN

00 Without Robot Cable	**01** Elite CS UR CB	SIASUN Hanwha A UR E	DOBOT CR DOBOT Nova	**02** AUBO	**04** JAKA	**06** ROKAE SR ROKAE ER	**09** Doosan A	**11** Elite EC	**13** Neuromeka	**15** Hanwha HCR		
				03 ELEPHANT	**05** TECHMAN	**07** DOBOT MG400	**10** Doosan M	**12** Han's	**14** FAIRINO	**16** UF x Arm	**17** ROKAE CR	

*⑤ It is recommended that no more than 4units of DH-Robotics products be accessed on a single 485 bus, otherwise 485 communication anomalies may occur. If you need to access more than 4 devices, it is recommended to contact the sales staff for product adjustment.
The Modbus RTU (RS485) to USB module will no longer be provided for free. Please place a separate order if needed.

TECHNICAL SPECIFICATIONS



Static Vertical Allowable Load	
Fz	200 N

Allowable Loading Moment	
Mx	2.5 N·m
My	2 N·m
Mz	3 N·m

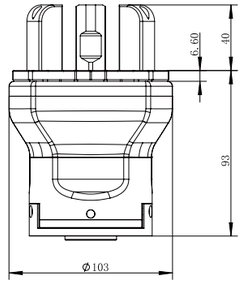
*② The recommended load calculation is based on pure friction force gripping, with a friction coefficient of 0.2 and a safety factor of 4. The center of gravity shift of the gripped object will also affect the load. If you have any questions, please consult us.
*③ Requires external communication convertor or customization, pleass contact sales or technical support.
*④ When selecting the power supply, please select according to the peak current. If the current is lower than the parameter, it will cause the product can not work normally.

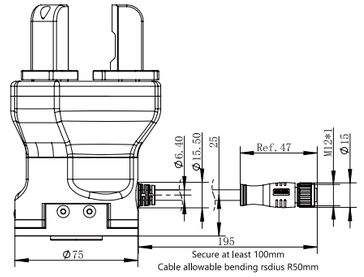
Product Parameter	
Gripping force (per jaw)	20~80 N
Recommended workpiece weight *②	1.5 kg
Single jaw	10 mm
Full stroke opening/closing time	0.5 s/0.5 s
Repeat accuracy (position)	± 0.03 mm
Weight	1.5 kg
Size	141 mm x 103 mm x 75 mm
Noise emission	< 50 dB
Driving method	Precise planetary gear reducer + Rack and pinion

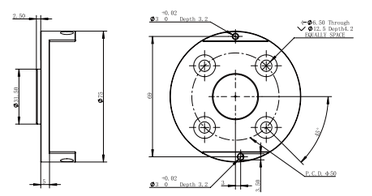
Working Environment	
Communication interface	Standard: Modbus RTU (RS485)、Digital I/O(2 inputs 2 outputs) Optional: TCP/IP、USB2.0、CAN2.0A、PROFINET、EtherCAT *③
Rated voltage	24 V DC ± 10%
Current	0.5 A(Rated)/ 1.2 A(Peak) *④
Rated powert	12 W
IP class	IP 67
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

Build-in Controller · Gripping Force Adjustable · Position Adjustable · Speed Adjustable · Drop Detection · Plug & Play · Self-locking Mechanism

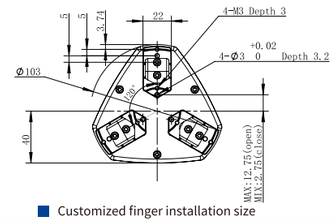
Technical Drawings







■ Conform to ISO 9409-1-50-4-M6 Standard flange
*For customized flanges, we recommend designing according to the robot mounting holes, or contact us.



■ Customized finger installation size

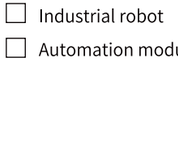
Short wire correspondence table

Our gripper can directly connect to the end interface of each brand of collaborative robot through a short wire.
(The serial number represent the short wire type.)

Support electric gripper models	UR CB Series	UR E Series	Elite CS Series	SIASUN	Hanwha A Series	ROKAE CR Series	DOBOT CR Series	DOBOT Nova Series	Aubo	Elephant	Jaka	ECHMAN	ROKAE SR Series	ROKAE ER Series	DOBOT MG400	UR E Series	Doosan A Series	Doosan M Series	Elite EC Series	Han' s Robot	Neuromeka	FAIRINO	Hanwha HCR	UF xArm	ROKAE CR
Small current electric gripper (Peak current≤0.6A)	01																								
Small current electric gripper (Peak current＜1.5A)		01	01	01	01				02	03	04	05	06	06	07										
High current electric claw (Peak current＞1.5A)																08									
In common (Support large and small current electric gripper)						01	01	01									09	10	11	12	13	14	15	16	17

DH-Robotics' Gripper and Cylinder communication converter

The communication within DH-Robotics' Servo Gripper and Servo Electric Cylinder defaults to Modbus RTU (RS485) and a small number of I/O(2 inputs 2 outputs). If customers choose other communication converter, they will need to use the communication converter.
The following communication converter are available for selection:

	communication converter Name	Ordering Model
	EtherCAT 1-1	M2E-B1-1
	EtherCAT 1-4	M2E-B1-4
	EtherCAT转 I/O 1-More	Please contact our technical staff confirm the specific parameters

	communication converter Name	Ordering Model
	TCP/IP 1-1	M2T-B1-1-YBT
	PROFINET 1-2	M2P2-B1-2-HJ
	PROFINET 1-接11	M2P-B1-11-9
	Modbus RTU (RS485) to USB Converter Module	A801-0036-WG

Quick Selection Reference

According to the following five conditions, you can quickly and initially select the matching gripper model; or you can also consult sales for detailed understanding and selection.

Condition 1
Application

- ☐ Collaborative robot
  - ○ Load
  - ○ Peak current
- ☐ Industrial robot
- ☐ Automation module

Condition 2
Workpiece weight

- ☐ Workpiece shape
- ☐ Workpiece material
- ☐ Friction
- ☐ ...

Condition 3
Gripping stroke

- ☐ Workpiece size
- ☐ Parallel / centric
- ☐ Outer clip, inner support
- ☐ Fingertip design
- ☐ ...

Condition 4
Feature selection

- ☐ Rotary
- ☐ Self-locking
- ☐ Envelope grab
- ☐ ...

Condition 5
Environmental requirements

- ☐ IP class
- ☐ Temperature conditions
- ☐ ...

Precautions on Model Selection

Note 1: Confirm the required gripping force and workpiece quality

When the workpiece is clamped by the friction force generated by the clamping force, the required clamping force is calculated as follows:

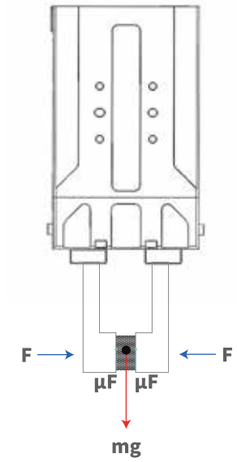
- F: Clamping force (N)
- μ: Friction coefficient
- m: Workpiece quality (kg)
- g: Acceleration due to gravity (9.8m/s²)
- mg: Workpiece weight (N)

Clamped workpiece, The condition that the workpiece will not fall is

$$2 \times \mu F > mg$$

number of gripper fingers

$$\text{Thus: } F > \frac{mg}{2 \times \mu}$$



Friction coefficient μ	Fingertip and workpiece material (benchmark)
0.1	Metal(Surface roughness under Rz3.2)
0.2	Metal
Over 0.2	Rubber, resin

(Reference) The friction coefficient(μ) varies depending on the usage environment, surface pressure, workpiece shape, etc.

Note 2: Confirm gripper stroke and fingertip

· The stroke of the gripper needs to be greater than the difference between the maximum and minimum dimensions of the workpiece.
· Choose the right fingertip: The fingertip is too long, too big, and the weight is too heavy, the inertia force or bending moment when opening and closing will affect the gripper, which may cause the performance of the gripper to decrease or shorten the service life.

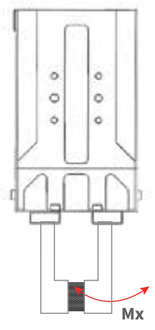
Note 3: Check the external force exerted on the gripper

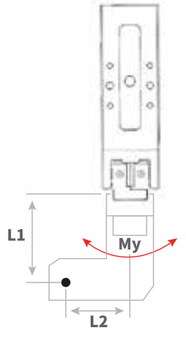
· The vertical load borne by the clamping jaw must be within the allowable load.

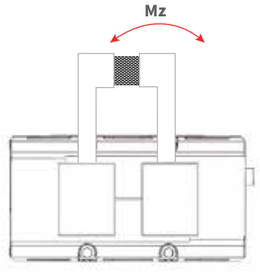
· The moment the clamping jaws bear must be within the maximum allowable load moment.

· Allowable load $F(N) = \frac{M(\text{Load allowable moment}) \ (N \cdot m)}{L(mm) \times 10^{-3}}$

Note: Mx and My are calculated by L1, and Mz is calculated by L2. Confirm whether the calculated gripper can withstand the external force (based on the smaller F value calculated from Mx, My, Mz).



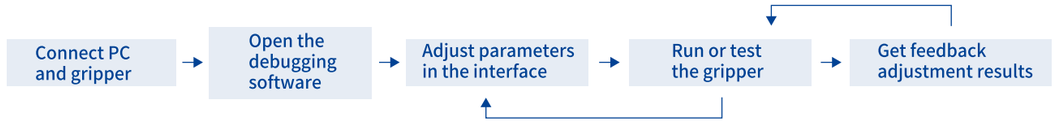




Host Computer Debugging Software（PC Side）

User-friendly

The host computer debugging software was self-developed by DH-Robotics, it can help customers easily and quickly complete various function parameters adjustments, testing and initialization setting on the PC side. At the meaning time, various status information is provided in real time, which can save a lot of production line setup time and reduce the difficulty of operation and maintenance for on-site engineers.



Parameters Adjustable

- gripping force
- fingertip position
- gripping speed
- rotation angle*
- rotation speed*
- rotation force(torque force)*

Real-time feedback

- four gripping states
  ①movement status
  ②in place
  ③clamp state
  ④ dropped state
- location versus time graph
- clamping current as a fuction of time

Example: DH-Robotics PC software

* Please consult sales person for specific applicable models

Honors and Certificates

– Some of Our Certificates

1

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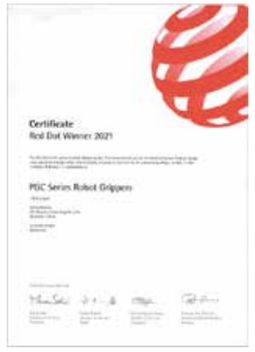

4

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1.CE Ceritficate
2. IP Class Ceritficate
3.RoHS Ceritficate
4.EMC Ceritficate
5.FCC Ceritficate
6.Low Temperature Test Report
7.Intellectual Property Management System Certification

Customer Trust

More than 800 customers around the world are using DH-Robotics products

The number of customers continues to grow rapidly. . .

Product Distribution

Chinese Agent Distribution Cties

Beijing/Changchun/Changsha/Chengdu/Chongqing/Dalian/Dongguan/
Guangzhou/Hangzhou/Hefei/Jinan/Nanchang/Nanjing/Ningbo/Qingdao/
Shanghai/Shenyang/Shenzhen/Suzhou/Wuhan/Wuxi/Xi'an/Xiamen/Yantai/
Yangzhou/Zhengzhou/Zhuhai

Overseas Agents Distribution Area

Europe: Spain / France / Italy / Germany / UK / Czech Republic / Romania / Russia / Netherlands / Lithuania / Sweden / Denmark / Norway

Asia: Israel / Bangladesh / India / Japan / Thailand / South Korea / Malaysia

Australia: Australia / New Zealand

America: United States / Mexico

Middle East: Saudi Arabia / Tunisia / Türkiye

VERSION CHANGE LOG

Revision Date	Released Version	Change Log
2025.04	CN.2504	· The RS485 module option has been removed from the selection parameters. Please purchase separately if needed.
2025.02	CN.2502	· Discontinuation of RGD-5-30 and PGS-5-5 products · RGIC-35-12 height changed from 150 to 165 · RGIC-100-35 height changed from 159 to 174 · PGE-2-12: 0.15s / 0.2s · RGI-100-14: 0.45s / 0.25s · RGI-100-22: 0.5s / 0.3s · RGI-100-30: 0.55s / 0.35s · RGIC-35-12: 0.5s / 0.4s · New Electric Adaptive Gripper: DH-5
2024.07	CN.2407	· New Product in the PGI Series: PGI-80-80 · Added the rated parameter, the precautions for power supply selection, the precautious for 485 communication protocol · PGE-2-12 & PGE-15-10 added controller diagram and grounding tips, cable length notes · PGE-5-26 canceled brake · PGE-100-26 added bottom cable version · PGE-5-26, PGE-8-14, PGE-15-26, PGE-50,PGE-100-26 added 15 meter extend cable · PGC-140-50 open/close time updated to 0.75s, peak current updated to 1.2A, drawing updated · CGC-80-10 open/close time updated to 0.5s, rated current update to 0.5A, peaked current updated to 1.2A, added 01 robot cable · PGS-5-5 cable updated to L1,L5, added controller diagram · CGE-10-10 product iteration, product structure updated, drawing updated · Notes on optional communication protocol updated · PGS-5-5 added external diagram · RGD Series added parameter table of rotational time in place for different inertia loads · CGC-80-10 added 01 robot cable

Due to continuous product upgrades, content changes may occur without prior notice.