

DH-ROBOTICS

DH-Robotics is a high-tech company which focus on providing core components for industrial intelligent manufacturing scenarios. Based on the self-developed precision force control direct drive technology, we provide customers in various industries around the world with diversified electric grippers and precision motion products to reduce production costs, improve production efficiency, and achieve intelligent manufacturing.

Our Support System



R&D System







R&D



Engineering Management



Sales Network



Projects Assessment



Training



Quality Supervision



After-sales Service



Manufacturing



Quality System



Stock Management



Supply Management



Manufacturing

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4 90
30 31 32 33





PGHL Series

Heavy-Load Long-Stroke Electric Parallel Gripper



PGHL-400-80

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PGS Series

Miniature Electromagnetic Gripper



PGS-5-5

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PGC Series

Electric Collaborative Parallel Gripper



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AG Series

Electric Adaptive Gripper



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CG Series

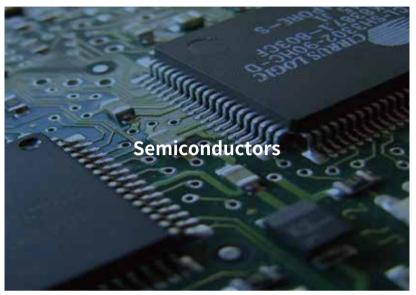
Electric Centric Gripper



CGE-10-10	49
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Applications in Cutting-edge Industries

More solutions and applications, please visit www.dh-robotics.com





















Application cases



PGE-8-14 Automatic Application

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



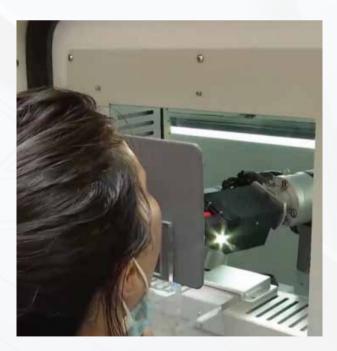
PGE-8-14 Electronics

Handling and positioning of very small workpieces.



RGI-35-14 Medical Automation

The automatic sub-cup processing system, through ABB's Scara robotic arm and DH-Robotics electric gripper, can automatically complete the operation of sample tube opening, scanning, information entry, pipetting, turning plate, and closing lid.



PGE-15-26 Medical Automation

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

Application cases



PGC-50-35 Automation

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



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 Automotive

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



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.



Short wire correspondence table

Our gripper can directly connect to the end interface of each brand of collaborative robot through a short wire.

Wire No	Support electric gripper models	UR	Dobot	Aubo	Jaka	Elite	TM	Doosan	Elephant	SINSUN	ROKAE	Han's Robot	Neuro- meka	Hanwha
W0	Small current electric gripper (Peak current≤0.6A)	CB Series												
Wa	Small current electric gripper (Peak current<1.5A)	E Series	CRSeries			CS Series				V				V
Wb	High current electric claw (Peak current≤1.5A)	E Series												
Wc	Small current electric gripper (Peak current<1.5A)			V										
Wd	Small current electric gripper (Peak current<1.5A)								V					
We	In common (Support large and small current electric gripper)							ASeries						
Wf	In common (Support large and small current electric gripper)							MSeries						
Wg	Small current electric gripper (Peak current<1.5A)				V									
Wh	Small current electric gripper (Peak current<1.5A)						V							
Wi	Small current electric gripper (Peak current<1.5A)										V			
Wj	In common (Support large and small current electric gripper)					ECSeries								
Wk	In common (Support large and small current electric gripper)											V		
Wl	In common (Support large and small current electric gripper)												V	

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	Condition 2 Workpiece weight	Condition 3 Gripping stroke	Condition 4 Feature selection	Condition 5 Environmental requirements
<u>♦</u>				IP 67
☐ Collaborative robot	☐ Workpiece shape	☐ Workpiece size	Rotary	☐ IP class
O Load	☐ Workpiece material	Parallel / centric	☐ Self-locking	Temperature conditions
O Peak current	Friction	Outer clip, inner support	☐ Envelope grab	□
☐ Industrial robot	□	Fingertip design	□	
☐ Automation module		□		

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



* Please consult sales person for specific applicable models





Precision force control

Small Size

Fast Response



All-in-one Design



Adjustable Parameters



Intelligent Feedback



Replaceable Fingertip



Self-locking Mechanism



PGE-2-12







PGE-15-10 PGE-15-26

PGE-50-26

	Gripping Force (N)	Stroke (mm)	Time (s)			IP Class	
	25 50 100 150 200 250 300		0.15	0.3	0.45	0.5	IP40
PGE-2-12	ı	12	0 •	 		 	•
PGE-5-26		26		0 •		 - -	•
PGE-8-14	=	14		0		 	•
PGE-15-10		10		0			•
PGE-15-26	-	26				0•	•
PGE-50-26		26		1	0 •	 	•
PGE-100-26		26		1		0 •	•

RGI Series Electric Rotary Gripper

Dual Servo System

Compact Type



Drive&Control



Adjustable

Parameters







Replaceable Fingertip



RGIC-35-12 RGIC-100-35 RGI-35-14 RGI-35-30



RGI-100-14 RGI-100-22 RGI-100-30

	Gripping Force (N)	Stroke (mm)	Time (s)			IP Class		
	25 50 100 150 200 250 300		0.55	0.6	0.65	0.7	0.9	IP40
RGIC-35-12		12		0 •	 	l I	l I	•
RGIC-100-35		35			 	i I	0	•
RGI-35-14		14	0 •		 	 	[•
RGI-35-30		30			O •			•
RGI-100-14		14		0 •				•
RGI-100-22		22			O•	I I	i I	•
RGI-100-30		30			 	 	I I	•

RGD Series Electric Direct Drive Rotaty Gripper

Zero Backlash

Infinite Rotation

-0

Precise Positioning









Replaceable



Self-locking Mechanism











Integrated Drive&Control

Adjustable Parameters Intelligent Feedback

Fingertip

RGD-5-14

RGD-5-30

RGD-35-14 RGD-35-30

RGD-5-14 RGD-5-30 RGD-35-14 RGD-35-30

Gripping Force (N)	Stroke (mm)	Tim	IP Class	
25 50 100 150 200 250 300		0.5	0.7	IP40
L	14	O •	 	•
I	30	◎ ●		•
	14	○ ●		•
	30		•	•

PGI Series

Electric Parallel Gripper



High Protection Grade

Long Stroke







Parameters



Feedback



Replaceable Self-locking Fingertip Mechanism



PGI-140-80

	Gripping Force (N)	Stroke (mm)	Time (s)	IP Class
	25 50 100 150 200 250 300		1.1	IP54
PGI-140-80		80	○ •	•

PGHL Series

Heavy-Load Long-Stroke Electric Parallel Gripper

High Load

High Protection Grade

Long Stroke



Integrated
Drive&Control



Adjustable Parameters



Intelligent Feedback



Replaceable Fingertip



Self-locking Mechanism



PGHL-400-80

	Gripping Force (N)	Stroke (mm)	Time (s)		IP Class
	25 50 100 150 200 250 400		1.0	1.1	IP40
100-80		80	0	•	•

PGHL-400-80

PGS Series

Miniature Electro-magnetic Gripper

Small Size

High Frequency





All-in-one Design



Replaceable Fingertip



Self-locking Mechanism



PGS-5-5

PGS-5-5

Gripping Force (N) 25 50 100 150 200 250 300	Stroke (mm)	Time (s) 0.03	IP Class IP40
I .	5	© •	•

PGC Series

Electric Collaborative Parallel Gripper

Plug and Play

High Protection Grade

High Load



Integrated Drive&Control



Adjustable Parameters



Intelligent Feedback



Replaceable Fingertip



Self-locking Mechanism



PGC-50-35



PGC-140-50



PGC-300-60

PGC-50-35 PGC-140-50 PGC-300-60

	Gripping Force (N)	Stroke (mm)	Time (s)		IP Class		
	25 50 100 150 200 250 300		0.6	0.7	0.8	IP54	IP67
		37		0 •		•	
)		50	0 •				•
)		60			0		•

AG Series

Electric Adaptive Gripper

Plug and Play

Envelope Adaptive Gripping

Long Stroke



Integrated Drive&Control



Adjustable Parameters



Intelligent Feedback



Replaceable Fingertip



Self-locking Mechanism



AG-160-95



AG-105-145

DH-3



AG-160-95 AG-105-145 DH-3

Gripping Force (N)	Stroke (mm)	Time (s)		IP Class	
25 50 100 150 200 250 300		0.7	0.9	IP40	IP54
	95		© •		•
	145		○ •		•
	106(parallel)/122(centric)	© •		•	

CG Series Electric Centric Gripper

Centric Gripping High Performance





Integrated Drive&Control



Adjustable Parameters



Intelligent Feedback



Replaceable Fingertip



Self-locking Mechanism



CGE-10-10



CGI-100-170



CGC-80-10

CGE-10-10
CGI-100-170
CGC-80-10

Gripping Force (N)	Stroke (mm)	Time (s)		IP C	lass	
25 50 100 150 200 250 300		0.2	0.3	0.5	IP40	IP67
	10 (Single jaw)		0 •			
	ф40~ф170 (Inward work-piece diameter)		 	0	•	
	10 (Single jaw)	0 •				•

PGE Series Slim-type Electric Parallel Gripper

PGE-2-12 PGE-15-26 PGE-5-26 PGE-50-26 PGE-8-14 PGE-100-26

PGE-15-10

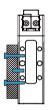


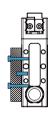
The PGE series is an industrial slim-type electric parallel gripper. With its precise force control, compact size and highly working speed, it has become a "Hot sell product" in the field of industrial electric gripper.

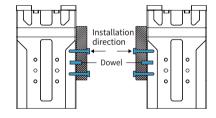
Installation

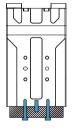


- 1. Front installation: use front screw holes for installation
- 2. Rear installation: use rear screw holes for installation
- 3. Right installation: use right screw holes for installation
- 4. Left installation: use left screw holes for installation
- 5. Bottom installation: use bottom screw holes for installation









Product Features

Small sizeFlexible Installation

The thinnest size is 18 mm with compact structure, supports at least five flexible installation methods to meet the needs of clamping tasks & saves design space.

High Working Speed

The fastest opening and closing time can reach $0.15 \, \text{s} \, / \, 0.15 \, \text{s}$, 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 repeatability could reach 0.1 N.



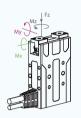


Application

For scenarios requiring force control or flexibility, such as assembly, sorting and loading and unloading in semiconductor, 3C electronics, medical automation and other industries.

PGE-2-12





Static Vertical Allowable Load

Allowable Loading Moment

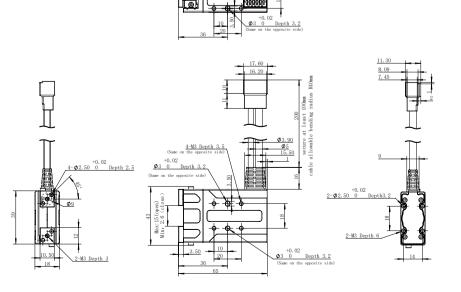
Mx	0.2 N⋅m
Му	0.17 N·m
Mz	0.2 N⋅m

 $^{^*}$ ① It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

Parameters

Product Paramet	er	
Gripping force (pe	rjaw)	0.8~2 N
Stroke		12 mm
Recommended wo	orkpiece weig	ht * ⁰ 0.05 kg
Opening/closing t	ime	0.15 s/0.15 s
Repeat accuracy (oosition)	\pm 0.02 mm
 Noise emission		< 40 dB
Weight		0.15 kg
Driving method	Rack and p	inion + Cross roller guide
Size		r Size:65 mm x 39 mm x 18 mm ze:78 mm x 52.4 mm x 27.2 mm
Working Environ	ment	
Communication interface	Stan Optional: TCP/IP, U	dard: Modbus RTU (RS485), Digital I/O JSB2.0, CAN2.0A, PROFINET, EtherCAT *②
Rated voltage		24 V DC \pm 10%
Rated current		0.2 A
Peak current		0.5 A
IP class		IP 40
Recommended en	vironment	0~40°C, under 85% RH
Certification		CE, FCC, RoHS

			- ,	,	
0	•	•	•	•	0
Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Self-locking Mechanism



 $^{^{\}star} @$ Use optional communication, need external communication conversion box, please consult the sales staff for details

PGE-5-26



Static Vertical Allowable Load

Fz	50 I	V
1 4	JU 1	

Allowable Loading Moment

Mx	0.3 N·m		
Му	0.25 N·m		
Mz	0.3 N·m		

 $^{^*\}mbox{\footnote{$^{\circ}$}}$ It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

Parameters

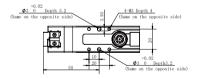
Product Paramete	er	
Gripping force (per	jaw)	0.8~5 N
Stroke		26 mm
Recommended wor	kpiece weight * [®]	0.1 kg
Opening/closing tir	ne	0.3 s/0.3 s
Repeat accuracy (p	osition)	\pm 0.02 mm
Noise emission		< 40 dB
Weight		0.4 kg
Driving method	Rack and pinion + C	ross roller guide
Size		x 26 mm(without brake) nm x 30 mm(with brake)

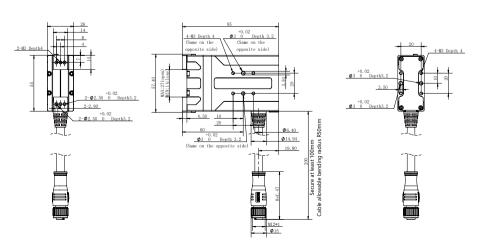
Working Environment			
Communication interface		tandard: Modbus RTU (RS485), Digital I/O P, USB2.0, CAN2.0A, PROFINET, EtherCAT *②	
Rated voltage		24 V DC \pm 10%	
Rated current		0.4 A	
Peak current		0.7 A	
IP class		IP 40	
Recommended er	vironment	0~40°C, under 85% RH	
Certification		CE, FCC, RoHS	
			۰

•	•	•	•	•	•0
Build-in	Gripping Force	Position	Speed	Drop	Self-locking
Controller	Adjustable	Adjustable	Adjustable	Detection	Mechanism

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.





 $^{^{\}star} @$ Use optional communication, need external communication conversion box, please consult the sales staff for details

PGE-8-14



Static Vertical Allowable Load

Allowable Loading Moment

Mx	0.55 N·m
Му	0.45 N·m
Mz	0.55 N·m

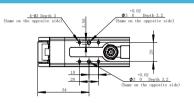
 $^{^*}$ ① It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

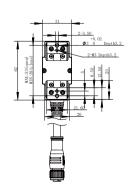
Parameters

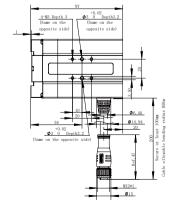
Product Paramete	er	
Gripping force (per	jaw)	2~8 N
Stroke		14 mm
Recommended wo	rkpiece weight * [®]	0.1 kg
Opening/closing tir	ne	0.3 s/0.3 s
Repeat accuracy (p	osition)	\pm 0.02 mm
Noise emission		< 40 dB
Weight		0.4 kg
Driving method	Rack and pinion + C	ross roller guide
Size	97 mm x	62 mm x 31 mm

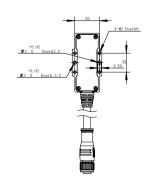
Working Enviror	Working Environment				
Communication interface	Standard: Modbus RTU (RS485), Digital I/O Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT *◎				
Rated voltage	24 V DC \pm 10%				
Rated current	0.4 A				
Peak current	0.7 A				
IP class	IP 40				
Recommended e	nvironment 0~40°C, under 85% RH				
Certification	CE, FCC, RoHS				

•	•	•	•	•	0
Build-in	Gripping Force	Position	Speed	Drop	Self-locking
Controller	Adjustable	Adjustable	Adjustable	Detection	Mechanism





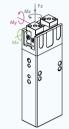




 $^{^{\}star} @$ Use optional communication, need external communication conversion box, please consult the sales staff for details

PGE-15-10





Static Vertical Allowable Load

Fz 35 N

Allowable Loading Moment

Mx	0.45 N·m
Му	0.4 N⋅m
Mz	0.45 N⋅m

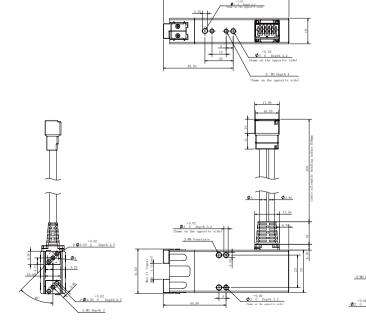
 $^{^*}$ ① It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

Parameters

arameter	
rce (per jaw)	6~15 N
	10 mm
ided workpiece weight *®	0.25 kg
osing time	0.3 s/0.3 s
uracy (position)	\pm 0.02 mm
sion	< 60 dB
	0.155 kg
thod Precise planetary gea	ars + Rack and pinion
	ze:89 mm x 30 mm x 18 mm 8 mm x 52.4 mm x 27.2 mm
	rce (per jaw) ded workpiece weight *® osing time uracy (position) sion thod Precise planetary ges

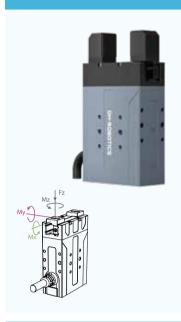
Working Environ	ment
Communication interface	Standard: Modbus RTU (RS485), Digital I/O Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT *®
Rated voltage	24 V DC \pm 10%
Rated current	0.1 A
Peak current	0.22 A
IP class	IP 40
Recommended er	nvironment 0~40°C, under 85% RH
Certification	CE, FCC, RoHS

0	•	•	•	•	0
Build-in	Gripping Force	Position	Speed	Drop	Self-locking
Controller	Adjustable	Adjustable	Adjustable	Detection	Mechanism



 $^{^*\@}ifnextchar[{\@monoscrip}{@{\@m$

PGE-15-26



Static Vertical Allowable Load

Fz	70 N
----	------

Allowable Loading Moment

MX	0.9 N·m
Му	0.75 N·m
Mz	0.9 N·m

 $^{^*}$ ① It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

Parameters

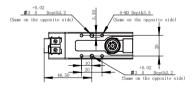
Product Parame	ter	
Gripping force (po	er jaw)	6~15 N
Stroke		26 mm
Recommended w	orkpiece weight * [®]	0.25 kg
Opening/closing	Opening/closing time	
Repeat accuracy	(position)	\pm 0.02 mm
Noise emission		<40 dB
Weight		0.33 kg
Driving method	Precise planetary gears	Rack and pinion
Size		26 mm(without brake) n x 26 mm(with brake)

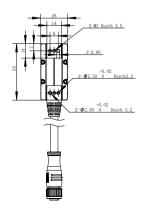
Working Enviro	nment
Communication interface	Standard: Modbus RTU (RS485), Digital I/O Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT *◎
Rated voltage	24 V DC \pm 10%
Rated current	0.25 A
Peak current	0.5 A
IP class	IP 40
Recommended e	nvironment 0~40°C, under 85% RH
Certification	CE, FCC, RoHS

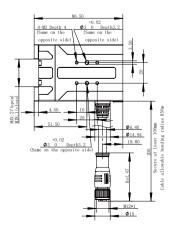
•	•	•	•	•	•0
Build-in	Gripping Force	Position	Speed	Drop	Self-locking
Controller	Adjustable	Adjustable	Adjustable	Detection	Mechanism

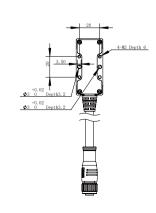
Technical Drawings

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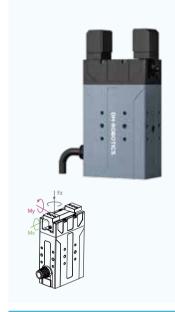






 $^{^{\}star} \ \!\!\! 2$ Use optional communication, need external communication conversion box, please consult the sales staff for details

PGE-50-26



Static Vertical Allowable Load

Fz	150 N

Allowable Loading Moment

Мx	2.5 N·m
Му	2 N·m
Mz	3 N⋅m

 $^{^*\}mbox{\footnote{$^{\circ}$}}$ It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

Parameters

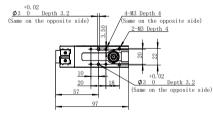
Product Parame	ter			
Gripping force (pe	er jaw)		15~50 N	
Stroke			26 mm	
Recommended w	orkpiece wei	ght * ^①	1 kg	
Opening/closing	time		0.45 s/0.45 s	
Repeat accuracy	(position)		\pm 0.02 mm	
Noise emission			< 40 dB	
Weight			0.4 kg	
Driving method	Precise plane	tary gears + R	ack and pinion	
Size			nm(without brake) 29 mm(with brake)	

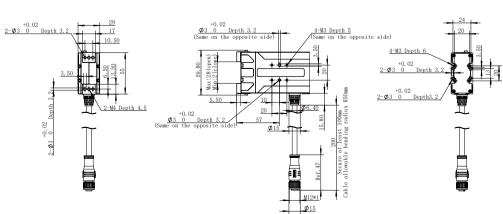
Working Environment		
Communication interface		andard: Modbus RTU (RS485), Digital I/O , USB2.0, CAN2.0A, PROFINET, EtherCAT *②
Rated voltage		24 V DC \pm 10%
Rated current		0.25 A
Peak current		0.5 A
IP class		IP 40
 Recommended er	nvironment	0~40°C, under 85% RH
Certification		CE, FCC, RoHS

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

Technical Drawings

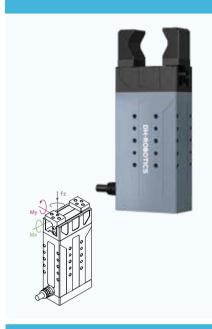
This drawing is for the gripper without the brake. If you need the drawing for the gripper with the brake, please download it from our official website or contact our sales.





 $^{^*\@}ifnextchar[{\@monoscrip}{@{\@\@monoscrip}{@{\$

PGE-100-26



Static Vertical Allowable Load

Allowable Loading Moment

Mx	2.5 N·m
Му	3 N⋅m
Mz	4 N⋅m

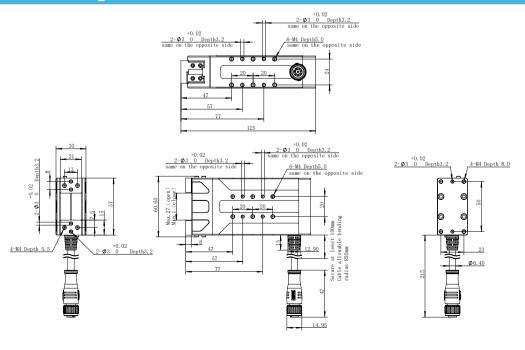
 $^{^*\}mbox{\Large (1)}$ It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

Parameters

Product Parameter	
Gripping force (per jaw)	30~100 N
Stroke	26 mm
Recommended workpiece weight *	2 kg
Opening/closing time	0.5 s/0.5 s
Repeat accuracy (position)	\pm 0.02 mm
Noise emission	< 60 dB
Weight	0.55 kg
Driving method Precise planetary gears	+ Rack and pinion
Size 125 mm x	57 mm x 30 mm

Working Environ	nent
Communication interface	Standard: Modbus RTU (RS485), Digital I/O Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT *②
Rated voltage	24 V DC \pm 10%
Rated current	0.3 A
Peak current	1.2 A
IP class	IP 40
Recommended en	vironment 0~40°C, under 85% RH
Certification	CE, FCC, RoHS

•	•	•	•	•	0
Build-in	Gripping Force	Position	Speed	Drop	Self-locking
Controller	Adjustable	Adjustable	Adjustable	Detection	Mechanism



 $^{^*\}mbox{@}$ Use optional communication, need external communication conversion box, please consult the sales staff for details

RGI Series Electric Rotary Gripper

RGIC-35-12 RGI-100-14 RGIC-100-35 RGI-100-22

RGI-35-30

RGI-35-14 RGI-100-30

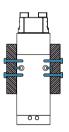


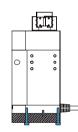
RGI series is the first fully self-developed infinite rotating gripper with a compact and precise structure on the market. It is widely applied in medical automation industry to grip and rotate the test tubes as well as other industries like electronics and New energy industry.

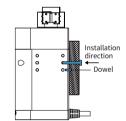


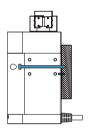
Installation

- 1. Side installation: use side screw holes for installation
- 2. Bottom installation: use bottom screw holes for installation
- 3. Rear installation: use rear screw holes for installation
- 4. Front installation: Install with front screw holes









Product Feature

Gripping & Infinite Rotation

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

CompactDouble 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.





Application

Medical automation reagents, blood samples, nucleic acids and other sample processing scenarios such as opening and closing covers, scaning code detection, etc.;

RGI-100 series comes standard with fingertips and can be adapted to $10 \, \text{mix} \, 1$ and $20 \, \text{mix} \, 1$ size tubes to meet the needs of large-scale nucleic acid sampling.

RGIC-35-12



Static Vertical Allowable Load

Ͱz		100 N

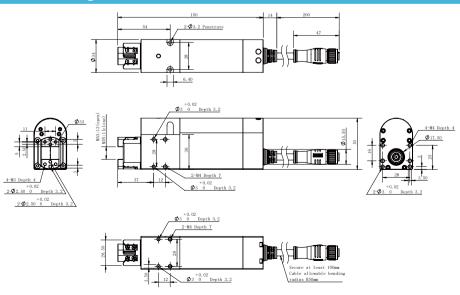
Allowable Loading Moment Mx 1.5 N·m

My 1.1 N·m

Mz 2.1 N·m

Parameters

Product Parameter				
Gripping force (per jaw)		13	~35 N	
Stroke			12	2 mm
Rated torque			0.2	$N \cdot m$
Peak torque			0.5	N·m
Rotary range		In	finite Rot	ating
Recommended workpied	ce weigh	t * ^①	().5 kg
Max. rotation speed			210	60 °/s
Repeat accuracy (swiveli	ng)		± (0.05°
Repeat accuracy (positio	n)		± 0.02	2 mm
Opening/closing time			0.6 s	/0.6 s
Weight			0.	64 kg
Size			nm x 53 mm x taty Diametei	
Working Environment				
Communication interface Optio	Sta onal: TCP/IP, U	ndard: Modbus JSB2.0, CAN2.0	RTU (RS485), D A, PROFINET, Et	igital I/O herCAT* ^②
Rated voltage		2	24 V DC ±	10%
Rated current				1.7 A
Peak current				2.5 A
IP class				IP 40
Recommended environn	nent	0~40°C,	under 85	% RH
Certification			CE, FCC, I	RoHS
Build-in Gripping Force Position Controller Adjustable Adjustable	Speed Adjustable	Drop Detection	Rotary Adjustable	Self-locking Mechanism



 $^{^*\}mbox{\Large \begin{tabular}{l} $^*\mbox{\Large \begin{tabular}{l} $^*\m$

 $^{^{\}star}$ ② Use optional communication, need external communication conversion box, please consult the sales staff for details

Fz

RGIC-100-35



Static Vertical Allowable Load

200 N

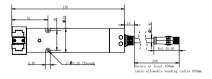
Allowable Lo	Allowable Loading Moment		
Mx	3 N·m		
Му	3 N⋅m		
M 7	2 5 N·m		

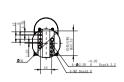
^{*}① It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

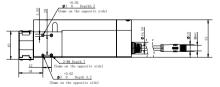
Parameters

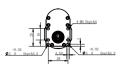
Product Parameter	
Gripping force (per jaw)	40~100 N
Stroke	35 mm
Rated torque	0.35 N·m
Peak torque	1.5 N·m
Rotary range	Infinite Rotating
Recommended workpiece weight *®	1 kg
Max. rotation speed	1400 °/s
Repeat accuracy (position)	± 0.02 mm
Opening/closing time	0.9 s/0.9 s
Weight	0.65 kg
Size	159 mm x 53 mm x 34 mm Rotaty Diameter:41mm

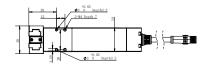
Working Environment					
Communication interface	Opt	Sta ional: TCP/IP, U	ndard: Modbus JSB2.0, CAN2.0	RTU (RS485), D A, PROFINET, E	oigital I/O therCAT* ^②
Rated voltage			2	24 V DC ±	: 10%
Rated current					2.0 A
Peak current 5.0 A			5.0 A		
IP class IP 40			IP 40		
Recommended environment 0~40°C, under 85% RH			% RH		
Certification				CE, FCC,	RoHS
• •	•	•	•	•	0
Build-in Gripping Force Controller Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Rotary Adjustable	Self-locking Mechanism











^{*}② Use optional communication, need external communication conversion box, please consult the sales staff for details

RGI-35-14



Static Vertical Allowable Load

F7		150 N
1 4		T20 IA

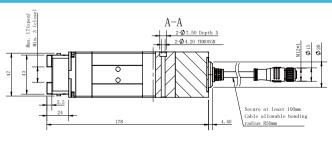
Allowable Loading Moment Mx 2 N·m

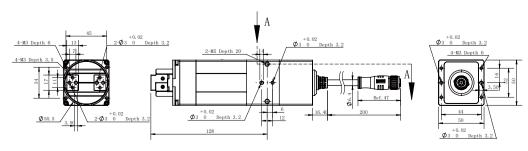
My 1.5 N·m

Mz 2.5 N·m

Parameters

Product Parameter		
Gripping force (per jaw)	10~35 N	
Stroke	14 mm	
Rated torque	0.25 N⋅m	
Peak torque	0.4 N·m	
Rotary range	Infinite Rotating	
Recommended workpiece weight *	0.7 kg	
Max. rotation speed	1500 °/s	
Repeat accuracy (swiveling)	± 0.05 °	
Repeat accuracy (position)	\pm 0.02 mm	
Opening/closing time	0.55 s/0.55 s	
Weight	1.0 kg	
Size	178 mm x 50 mm x 50 mm Rotaty Diameter:48.7mm	
Working Environment		
	d: Modbus RTU (RS485), Digital I/O .0, CAN2.0A, PROFINET, EtherCAT *②	
Rated voltage	24 V DC \pm 10%	
Rated current	1.1 A	
Peak current	2.0 A	
IP class	IP 40	
Recommended environment 0~	-40°C, under 85% RH	
Certification	CE, FCC, RoHS	
11 0	Drop Rotary Self-locking Mechanism	



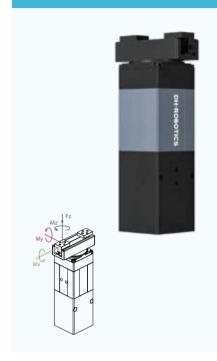


 $^{^*\}mbox{\Large \begin{tabular}{l} $^*\mbox{\Large \begin{tabular}{l} $^*\m$

 $^{^{\}star}$ ② Use optional communication, need external communication conversion box, please consult the sales staff for details

Fz

RGI-35-30



Static Vertical Allowable Load

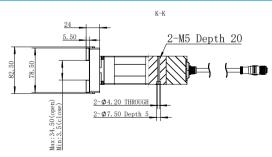
250 N

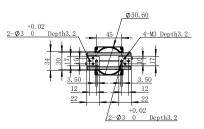
Allowable Loading Moment		
Mx	3.5 N⋅m	
Му	2.5 N·m	
Mz	4.5 N⋅m	

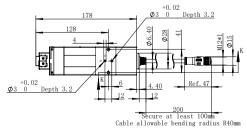
 $^{^*\}mbox{\Large \begin{tabular}{l} $^*\mbox{\Large \begin{tabular}{l} $^*\m$

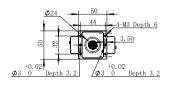
Parameters

Product Parameter		
Gripping force (per jaw)	10~35 N	
Stroke	30 mm	
Rated torque	0.25 N⋅m	
Peak torque	0.4 N⋅m	
Rotary range	Infinite Rotating	
Recommended workpiece weight *®	0.7 kg	
Max. rotation speed	1500 °/s	
Repeat accuracy (swiveling)	± 0.05°	
Repeat accuracy (position)	± 0.02 mm	
Opening/closing time	0.65 s/0.65 s	
Weight	1.2 kg	
Size	178 mm x 50 mm x 50 mm Rotaty Diameter:83.6mm	
Working Environment	,	
	Modbus RTU (RS485), Digital I/O , CAN2.0A, PROFINET, EtherCAT *②	
Rated voltage	24 V DC \pm 10%	
Rated current	1.1 A	
Peak current	2.0 A	
IP class	IP 40	
Recommended environment 0~4	10°C, under 85% RH	
Certification	CE, FCC, RoHS	
	op Rotary Self-locking Adjustable Mechanism	



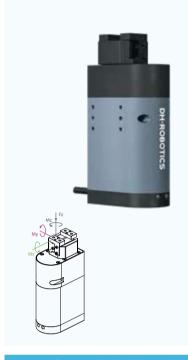






 $^{^{\}star}$ ② Use optional communication, need external communication conversion box, please consult the sales staff for details

RGI-100-14



Static Vertical Allowable Load

Fz	150 N

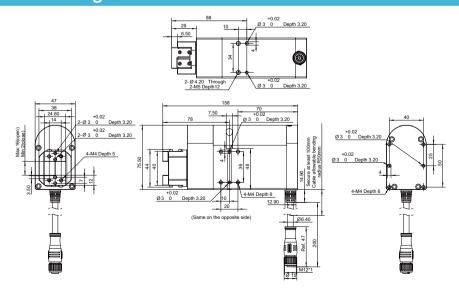
Allowable Loading Moment Mx 2.5 N·m

My 3 N·m

Mz 4 N·m

Parameters

Product Parameter			
Gripping force (per jaw)	30~100 N		
Stroke	14 mm		
Rated torque	0.5 N·m		
Peak torque	1.5 N⋅m		
Rotary range	Infinite Rotating		
Recommended workpiece weight * °	1.5 kg		
Max. rotation speed	2160 °/s		
Repeat accuracy (swiveling)	± 0.05°		
Repeat accuracy (position)	± 0.02 mm		
Opening/closing time 0.6 s/0.6 s			
Weight	1.28 kg		
Size ¹	L58 mm x 75.5 mm x 47 mm Rotaty Diameter:47.1mm		
Working Environment			
	Modbus RTU (RS485), Digital I/O CAN2.0A, PROFINET, EtherCAT *②		
Rated voltage	24 V DC \pm 10%		
Rated current	1.0 A		
Peak current	4.0 A		
IP class	IP 40		
Recommended environment 0~4	0°C, under 85% RH		
Certification	CE, FCC, RoHS		
Build-in Gripping Force Position Speed Dro Controller Adjustable Adjustable Adjustable Detec	, ,		



 $^{^*\}mbox{\Large \begin{tabular}{l} $^*\mbox{\Large \begin{tabular}{l} $^*\m$

 $^{^{\}star}$ ② Use optional communication, need external communication conversion box, please consult the sales staff for details

RGI-100-22



Static Vertical Allowable Load

Fz	200 N	1

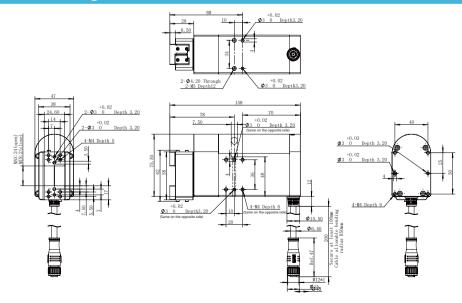
Allowable Loading Moment

Mx	3.5 N⋅m
Му	4 N·m
Mz	5.5 N·m

 $^{^*\}mbox{\Large (1)}$. It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

Parameters

Product Parameter			
Gripping force (per jaw)	30~100 N		
Stroke	22 mm		
Rated torque	0.5 N⋅m		
Peak torque	1.5 N⋅m		
Rotary range	Infinite Rotating		
Recommended workpiece weight * ®	1.5 kg		
Max. rotation speed	2160 °/s		
Repeat accuracy (swiveling)	± 0.05°		
Repeat accuracy (position)	\pm 0.02 mm		
Opening/closing time 0.65 s/0.65 s			
Weight 1.4 kg			
Size 158 mm x 75.5 mm x 47 mm Rotaty Diameter:67.1mm			
Working Environment			
	Nodbus RTU (RS485), Digital I/O CAN2.0A, PROFINET, EtherCAT *②		
Rated voltage	24 V DC \pm 10%		
Rated current	1.0 A		
Peak current	4.0 A		
IP class	IP 40		
Recommended environment 0~4	0°C, under 85% RH		
Certification	CE, FCC, RoHS		
Build-in Gripping Force Position Speed Dro Controller Adjustable Adjustable Detec	,		



 $^{^{\}star}$ ② Use optional communication, need external communication conversion box, please consult the sales staff for details

RGI-100-30



Static Vertical Allowable Load

Fz	250 N

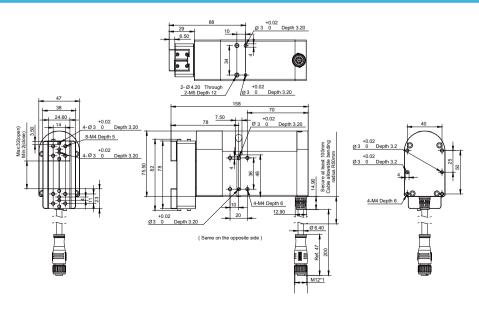
Allowable Loading Moment

Mx	4.5 N·m
Му	5 N·m
Mz	7 N⋅m

 $^{^*\}mbox{\Large (1)}$. It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

Parameters

Product Paran	neter						
Gripping force (Gripping force (per jaw)				30~100 N		
Stroke			30 mm				
Rated torque				0.5 N⋅m			
Peak torque			1.5 N·m				
Rotary range			In	Infinite Rotating			
Recommended	workpie	ece weigh	ıt * ^①	-	1.5 kg		
Max. rotation sp	peed			21	60 °/s		
Repeat accurac	y (swive	ling)		±	0.05°		
Repeat accurac	y (positi	on)		± 0.02	2 mm		
Opening/closing time 0.7 s			0.7 s	/0.7 s			
Weight	Weight			1.5 kg			
Size 158 mm x 75.5 mm x 47 mm Rotaty Diameter:84.8mm							
Working Environment							
Communication interface	Opt			RTU (RS485), D A, PROFINET, E			
Rated voltage			2	24 V DC ±	: 10%		
Rated current					1.0 A		
Peak current					4.0 A		
IP class					IP 40		
Recommended	environ	ment	0~40°C,	under 85	% RH		
Certification				CE, FCC,	RoHS		
Build-in Gripping Force Controller Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Rotary Adjustable	Self-locking Mechanism		



 $^{^{\}star}$ ② Use optional communication, need external communication conversion box, please consult the sales staff for details

RGD Series Electric Direct Drive Rotaty Gripper

RGD-5-14 RGD-35-14 RGD-5-30 RGD-35-30



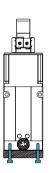
The RGD direct-drive electric rotary gripper of DH-Robotics adopts a direct-drive backlash-free rotation module to improve the rotary accuracy, and thus is perfectly suited for high-precision manufacturing applications.



Installation

- 1. Front installation: use front screw holes for installation
- 2. Bottom installation: use bottom screw holes for installation





Product Features

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 semiconductor 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 requirements of various applications.



Application

With the direct-drive technology, the RGD gripper can provide greatly improved rotary accuracy, which can be used in scenarios such as the high-precision positioning assembly, transport, and deflection correction of 3C electronics and semiconductors.

RGD-5-14



Static Vertical Allowable Load

Fz	150 N

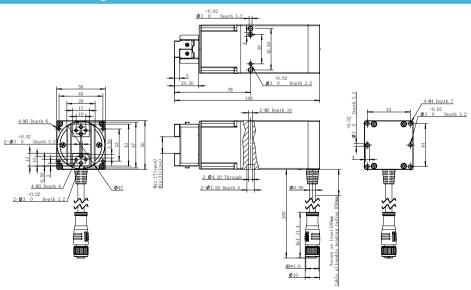
Allowable Loading Moment

Mx	2 N·m
Му	1.5 N⋅m
Mz	2.5 N·m

 $^{^* \}odot$. The peak torque can be increased up to 0.5N \cdot m. Please consult the technical support staff for details.

Parameters

Drod	luct Dava	motor					
L	Product Parameter						
Gripp	Gripping force (per jaw)				2-	-5.5 N	
Strok	ке				1	4 mm	
Rate	d torque				0.1	N·m	
Peak	torque *)			0.25 N·m		
Rota	ry range			I	nfinite Rot	ating	
Reco	mmende	d workpie	ece weigh	nt *®	0.	05 kg	
Мах.	rotation	speed			15	00 °/s	
Rota	ry backlas	sh			Zero bac	klash	
Repe	at accura	cy (swive	ling)		<u>+</u>	0.1°	
Repe	at accura	cy (positi	on)		± 0.0	2 mm	
Oper	ning/closi	ng time			0.5 s	/0.5 s	
Weig	Weight 0.86 kg(without brake)			out brake)	0.88 kg(wit	:h brake)	
Size 149 mm x 50 mm x 50 mm Rotaty Diameter:48.7 mm							
Worl	king Envi	ronment					
Com	municatio	on interfa	ce	ModI	ous RTU (F	RS485)	
Rate	Rated voltage $24 \text{ V DC} \pm 10\%$: 10%		
Rate	Rated current 1.2 A				1.2 A		
Peak current 2.5 A				2.5 A			
IP class IP 40				IP 40			
Recommended environment 0~40°C, under 85% RH				% RH			
Certification CE, FCC, RoHS				RoHS			
•	•	•	•	•	•	•0	
Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Rotary Adjustable	Self-locking Mechanism	



 $^{^*}$ ② It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

RGD-5-30



Static Vertical Allowable Load

Fz	150 N

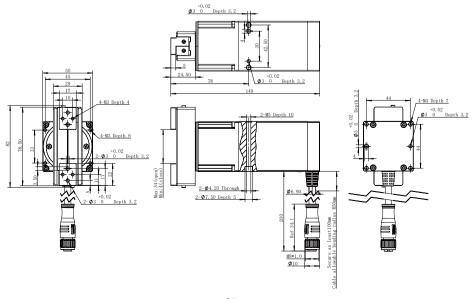
Allowable Loading Moment

Mx	2 N·m
Му	1.5 N·m
Mz	2.5 N⋅m

 $^{^* \}odot$. The peak torque can be increased up to 0.5N \cdot m. Please consult the technical support staff for details.

Parameters

Prod	luct Para	meter					
Grip	Gripping force (per jaw)				2-5.5 N		
Strol	Stroke				30 mm		
Rate	d torque				0.1	N·m	
Peak	torque *	0			0.25	N·m	
Rota	Rotary range			I	Infinite Rotating		
Reco	mmende	d workpi	ece weigh	nt *®	t * [©] 0.05 kg		
Max.	rotation	speed			15	00 °/s	
Rota	ry backlas	sh			Zero bac	klash	
Repe	at accura	cy (swive	ling)		<u>+</u>	0.1°	
Repe	at accura	cy (positi	ion)		± 0.0	2 mm	
Oper	ning/closi	ng time			0.5 s	/0.5 s	
Weig	;ht		1 kg(witho	ut brake)	1.02 kg(with	n brake)	
Size					mm x 50 mm x taty Diameter:		
Working Environment							
Com	municatio	on interfa	ce	Mod	bus RTU (F	RS485)	
Rate	d voltage				24 V DC ±	10%	
Rate	d current					1.2 A	
Peak	current					2.5 A	
IP cla	ass					IP 40	
Recommended environment 0~40°C, under 85% RH							
Certification					CE, FCC,	RoHS	
•	•	•	•	•	•	•0	
Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Rotary Adjustable	Self-locking Mechanism	



 $^{\ ^*(\ ^2)}$ It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

RGD-35-14



Static Vertical Allowable Load

Fz	150 N

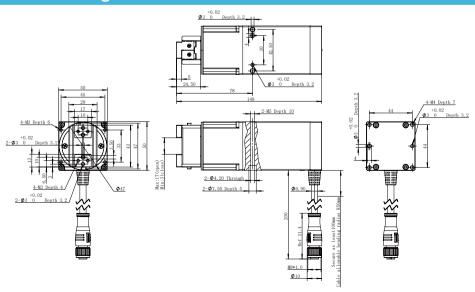
Allowable Loading Moment

Mx	2 N·m
Му	1.5 N·m
Mz	2.5 N·m

 $^{^* \}odot$. The peak torque can be increased up to 0.5N \cdot m. Please consult the technical support staff for details.

Parameters

Prod	uct Para	meter					
Gripp	ing force	(per jaw)			10	-35 N	
Strok	ке				14 mm		
Rate	d torque				0.1	N·m	
Peak	torque *	0			0.25	N·m	
Rota	ry range			l	Infinite Rotating		
Reco	mmende	d workpie	ece weigh	nt * ^②	0.	.35 kg	
Max.	rotations	speed			15	00 °/s	
Rota	ry backlas	sh			Zero bac	klash	
Repe	Repeat accuracy (swiveling)				<u>+</u>	0.1°	
Repe	Repeat accuracy (position)				± 0.02 mm		
Oper	Opening/closing time				0.5 s/0.5 s		
Weig	ht	0.	86 kg(with	out brake)	0.88 kg(wit	th brake)	
Size					9 mm x 50 mm otaty Diameter		
Worl	king Envi	ronment					
Com	Communication interface Modbus RTU (RS485)					RS485)	
Rate	d voltage				24 V DC ±	10%	
Rate	d current					1.2 A	
Peak	Peak current 2.5 A				2.5 A		
IP class IP 40					IP 40		
Recommended environment 0~40°C, under 85% RH					% RH		
Certi	fication				CE, FCC,	RoHS	
•	•	•	•	•	•	•0	
Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Rotary Adjustable	Self-locking Mechanism	



 $^{^*}$ ② It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

RGD-35-30



Static Vertical Allowable Load

Fz	150 N
ΓΖ	T20 IA

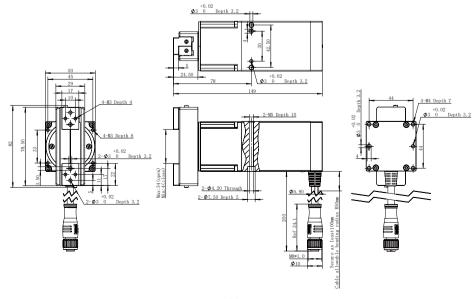
Allowable Loading Moment

Mx	2 N·m
Му	1.5 N·m
Mz	2.5 N⋅m

^{*}① The peak torque can be increased up to 0.5N \cdot m. Please consult the technical support staff for details.

Parameters

Product Parameter	
Gripping force (per jaw)	10-35 N
Stroke	30 mm
Rated torque	0.1 N·m
Peak torque * [®]	0.25 N·m
Rotary range	Infinite Rotating
Recommended workpiece weight *®	0.35 kg
Max. rotation speed	1500 °/s
Rotary backlash	Zero backlash
Repeat accuracy (swiveling)	± 0.1 °
Repeat accuracy (position)	± 0.02 mm
Opening/closing time	0.7 s/0.7 s
Weight 1 kg(without brake	e) 1.02 kg(with brake)
Size	149 mm x 50 mm x 50 mm Rotaty Diameter:83.6mm
Working Environment	
Communication interface Mo	odbus RTU (RS485)
Rated voltage	24 V DC \pm 10%
Rated current	1.2 A
Peak current	2.5 A
IP class	IP 40
Recommended environment 0~40	0°C, under 85% RH
Certification	CE, FCC, RoHS
Build-in Gripping Force Position Speed Drop Controller Adjustable Adjustable Adjustable Detect	,



 $^{^*}$ ② It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

PGI Series Electric Parallel Gripper

PGI-140-80

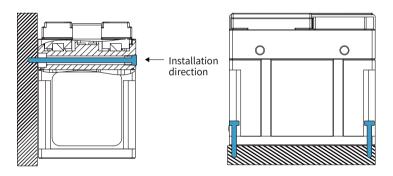


Based on the industrial requirements of "long stroke, high load, and high protection level", DH-Robotics independently developed the PGI series of industrial electric parallel gripper. The PGI series is widely used in various industrial scenarios with positive feedback.



Installation

- 1. Front and rear installation: use front and rear screw holes for installation
- 2. Bottom installation: use bottom screw holes for installation



Product Features

Long Stroke

Long stroke reach to 80 mm. With the customization fingertips, it can stably grasp the medium and large objects below 3kg and suitable for lots of industrial scenes.

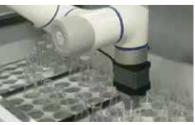
High Protection Level

The protection level of PGI-140-80 reaches to IP54, which is able to work under harsh environment with dust and liquid splash.

High Load

The maximum single-sided gripping force of PGI-140-80 is 140 N, and the maximum recommended load is 3 kg, which can meet more diverse gripping needs.

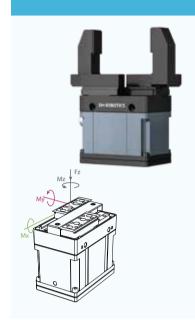




Application

In industrial scenarios, it is used for gripping, handling and assembly of heavy workpieces. Mostly used in new energy, auto parts, machining, 3C electronics and other industries.

PGI-140-80



Static Vertical Allowable Load

Fz 300 N

Allowable Loading Moment

Mx	7 N⋅m
My	7 N⋅m
Mz	7 N·m

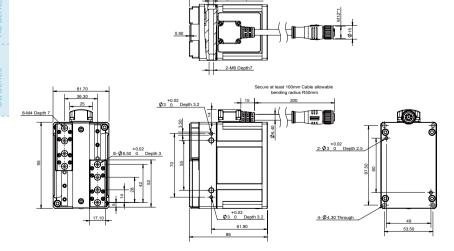
 $^{^*\}mbox{\Large (1)}$ It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

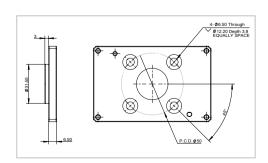
Parameters

Product Parame	ter		
Gripping force (pe	erjaw)	40~140 N	١
Stroke		80 mn	า
Recommended w	orkpiece weight	* ^{¹)} 3 kį	g
Opening/closing	time	1.1 s/1.1	S
Repeat accuracy	(position)	\pm 0.03 mn	า
Noise emission		< 50 dE	3
Weight		1 kg (exclude fingers)
Driving method	Precise planetary	gears + Rack and pinio	n
Size	95 mm	x 67.1 mm x 92.5 mn	า

Working Envi	ronment	
Communication interface	Standa Optional: TCP/IP, USE	ard: Modbus RTU (RS485), Digital I/O 32.0, CAN2.0A, PROFINET, EtherCAT *②
Rated voltage		24 V DC \pm 10%
Rated current		0.5 A
Peak current		1.2 A
IP class		IP 54
Recommended	d environment	0~40°C, under 85% RH
Certification		CE, FCC, RoHS

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





 $^{^{\}star} @$ Use optional communication, need external communication conversion box, please consult the sales staff for details

PGHL Series Heavy-Load Long-Stroke Electric Parallel Gripper

PGHL-400-80

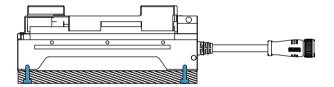


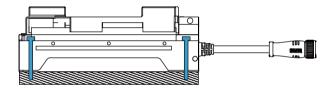
PGHL series is an industrial flat electric gripper developed and produced by DH-Robotics. With its compact design, heavy load and high force control accuracy, it can be applied to heavier load clamping requirements and more application scenarios.



Installation

Bottom installation: use bottom screw holes for installation





Product Features

Flat Electric GripperHigh Energy density

PGHL-400-80 industrial flat electric gripper, the structure of which is delicate and meticulous. The length, width and height dimensions is only $194 \times 73 \times 70$ mm. This model can provide large clamping force and fast clamping beat, coming with mechanical self-locking mechanism, challenge the limit of large load and thin size.

High Force Control Accurancy

The force repeatability is $\pm 40 \text{N}(\pm 10\%)$. Far better than ordinary products in the market by $\pm 10\% \sim \pm 20\%$ of force control accuracy.

Quick Response Intelligent planning speed

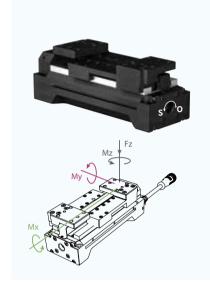
Opening/closing time up to 1.0s/1.1s, with speed control optimization and mechanical self-locking mechanism function, it can meet fast and stable gripping needs of the production line



Application

Applied in industrial production of large weight and large volume workpieces gripping and handling, such as lithium batteries in the new energy industry package gripping, large machined parts in automobile assembly production in automotive assembly.

PGHL-400-80



Static Vertical Allowable Load

Fz	1000 N
ΓΖ	TOOO IA

Allowable Loading Moment

Mx	50 N⋅m
Му	 50 N⋅m
Mz	 15 N·m

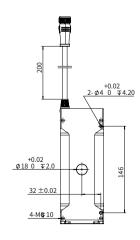
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Parameters

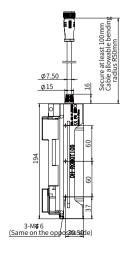
Product Parameter		
Gripping force (per jaw)		140∼400 N
Stroke		80 mm
Recommended workpiece	weight * ^①	8 kg
Opening/closing time		1.0 s/ 1.1 s
Repeat accuracy (position)		\pm 0.02 mm
Weight		2.2 kg
Driving method	Precise pla Tshaped lead screw+R	anetary gears + lack and pinion
Size	194 mm x 73 m	ım x 70 mm

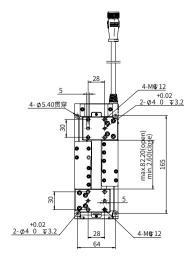
Working Environment	
Communication Standard: Modbus RTU (RS485), Digital I/ interface Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT	
Rated voltage DC 24 V \pm 109	6
Rated current 1.0	A
Peak current 3.0	A
IP class IP 4	0
Recommended environment 0~40°C, under 85% RI	Ⅎ
Certification CE、FCC、RoH	S

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









 $^{^{\}star} @$ Use optional communication, need external communication conversion box, please consult the sales staff for details

PGS Series Miniature Electro-magnetic Gripper

PGS-5-5

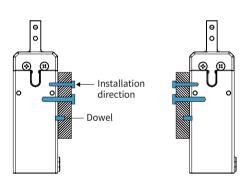


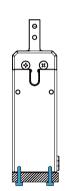
The PGS series is a miniature electromagnetic gripper with high working frequency. Based on a split design, the PGS series could be applied in space-limited environment with the ultimate compact size and simple configuration.



Installation

- 1. Front and rear installation: use front and rear screw holes for installation
- 2. Bottom installation: use bottom screw holes for installation





Product Features

● Small Size

Compact size with 20×26 mm, it can be deployed in a relatively small environment.

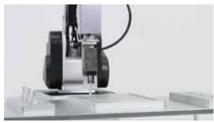


The opening/closing time could reach 0.03s to meet the needs of fast grasping.

Easy to Use

The configuration is simple with the Digital I/O communication protocol.

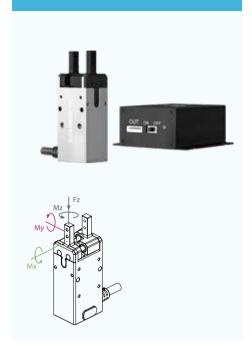




Application

High-frequency fast capture, detection, adjustment and other scenarios in 3C electronics, medical automation, semiconductor and other industries.

PGS-5-5



Static Vertical Allowable Load

Fz 150 N

Allowable Loading Moment

Mx	0.62 N·m
Му	0.62 N·m
Mz	0.62 N·m

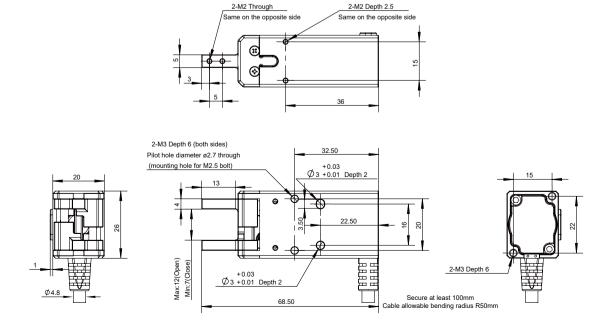
^{*}It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

Parameters

Product Parameter		
Gripping force (per jaw	<i>ı</i>)	3.5-5 N
Stroke		5 mm
Recommended workpi	iece weight *	0.05 kg
Opening/closing time		0.03 s/0.03 s
Repeat accuracy (posit	tion)	\pm 0.01 mm
Noise emission		< 50 dB
Weight		0.2 kg
Driving method	Electro	magnet + Spring
Size		5 mm x 26 mm x 20 mm m x 66.8 mm x 29.6 mm

Working Environment	
Communication interface	Digital I/O
Rated voltage	24 V DC \pm 10%
Rated current	0.1 A
Peak current	3.0 A
IP class	IP 40
Recommended environment	0~40°C, under 85% RH
Certification	CE, FCC, RoHS

0	0	0	0	0	•
Build-in	Gripping Force	Position	Speed	Drop	Self-locking
Controller	Adjustable	Adjustable	Adjustable	Detection	Mechanism



PGC Series Freddo Winner 2021 Electric Collaborative Parallel Gripper

PGC-50-35

PGC-140-50

PGC-300-60

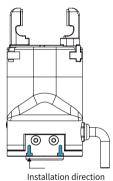


DH-Robotics PGC series of collaborative parallel electric grippers is an electric gripper mainly used in cooperative manipulators. It has the advantages of high protection level, plug and play, large load and so on. The PGC series combines precision force control and industrial aesthetics. In 2021, it won two industrial design awards, the Red Dot Award and the IF Award.



Installation

1. Bottom installation: use bottom screw holes for installation



Product Features

High protection level

The protection level of PGC series is up to IP67, so the PGC series is able to work under harsh conditions such as machine tending environment.

Plug & Play

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

High Load

The gripping force of the PGC series could reach 300 N, and the maximum load can reach 6 kg, which can meet more diverse gripping needs.





Application

With collaborative robots, it can complete a series of complex processes including gripping, handling, and assembly in scenarios such as medical automation, 3C electronics, new energy, and new robot retail.

PGC-50-35



Static Vertical Allowable Load

Fz 150 N

Allowable Loading Moment

Mx	2.5 N·m
Му	2 N·m
Mz	3 N⋅m

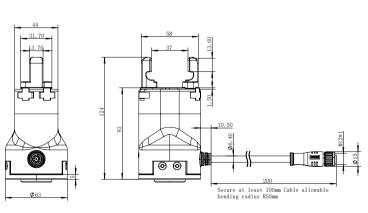
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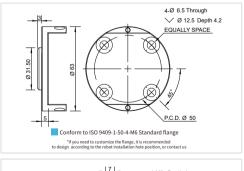
Parameters

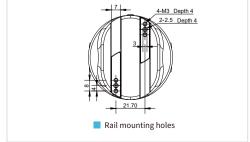
Product Parameter	
Gripping force (per jaw)	15~50 N
Stroke	37 mm
Recommended workpiece weight * [®]	1 kg
Opening/closing time	0.7 s/0.7 s
Repeat accuracy (position)	\pm 0.03 mm
Noise emission	< 50 dB
Weight	0.5 kg
Driving method Precise planetary gears +	Rack and pinion
Size 124 mm x 6.	3 mm x 63 mm

Working Environment				
Communication interface	Standa Optional: TCP/IP, USB	rd: Modbus RTU (RS485), Digital I/O 2.0, CAN2.0A, PROFINET, EtherCAT *②		
Rated voltage		24 V DC \pm 10%		
Rated current		0.25 A		
Peak current		0.5 A		
IP class		IP 54		
Recommended	d environment	0~40°C, under 85% RH		
Certification		CE, FCC, RoHS		

•	•	•	•	•	•	0
Build-in	Gripping Force	Position	Speed	Drop	Plug &	Self-locking
Controller	Adjustable	Adjustable	Adjustable	Detection	Play	Mechanism







 $^{^{\}star} @$ Use optional communication, need external communication conversion box, please consult the sales staff for details

PGC-140-50



Static Vertical Allowable Load

Allowable Loading Moment

Mx	7 N⋅m
Му	7 N⋅m
Mz	7 N⋅m

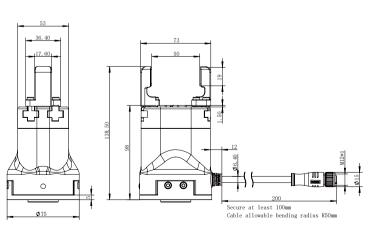
 $^{^*\}mbox{\Large (1)}$ It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

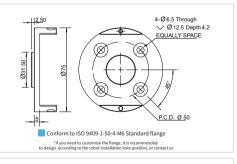
Parameters

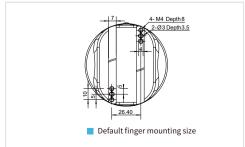
Product Parameter	
Gripping force (per jaw)	40~140 N
Stroke	50 mm
Recommended workpiece weight *®	3 kg
Opening/closing time	0.6 s/0.6 s
Repeat accuracy (position)	\pm 0.03 mm
Noise emission	< 50 dB
Weight	1 kg
Driving method Precise planetary gears +	Rack and pinion
Size 138.5 mm x	75 mm x 75 mm

Working Environment					
Communication interface		d: Modbus RTU (RS485), Digital I/O 2.0, CAN2.0A, PROFINET, EtherCAT *②			
Rated voltage		24 V DC \pm 10%			
Rated current		0.4 A			
Peak current		1.0 A			
IP class		IP 67			
Recommende	d environment	0~40°C, under 85% RH			
Certification		CE, FCC, RoHS			

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







 $[\]ensuremath{^*}\xspace$ Use optional communication, need external communication conversion box, please consult the sales staff for details

PGC-300-60



Static Vertical Allowable Load

Fz	600	N
ΓΖ	000	IN

Allowable Loading Moment

Mx	15 N·m
Му	15 N·m
Mz	15 N·m

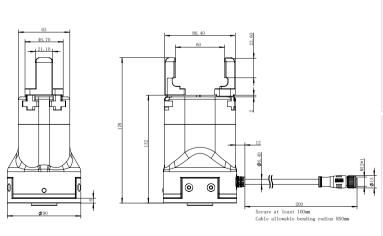
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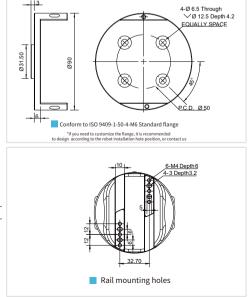
Parameters

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

Working Envi	ronment	
Communication interface	Standa Optional: TCP/IP, USE	ard: Modbus RTU (RS485), Digital I/O 32.0, CAN2.0A, PROFINET, EtherCAT *②
Rated voltage		24 V DC \pm 10%
Rated current		0.4 A
Peak current		2.0 A
IP class		IP 67
Recommende	d environment	0~40°C, under 85% RH
Certification		CE, FCC, RoHS

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





 $^{^{\}star} @$ Use optional communication, need external communication conversion box, please consult the sales staff for details

AG Series Product annul 2019 Product annul 2010 Electric Adaptive Gripper

AG-160-95 AG-105-145 DH-3

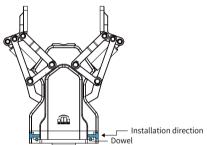


The AG series is a linkage-type adaptive electric gripper which is independently developed by DH-Robotics. With Plug& Play software many and exquisite structural design, AG series is a perfect solution to be applied with collabrative robots to grip work-pieces with different shapes in different industries.



Installation

1. Bottom installation: use bottom screw holes for installation



Product Features

Envelope Adaptive Capture

The gripper linkage mechanism 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 equipment, new energy and other industries.

AG-160-95



Static Vertical Allowable Load

Fz 300 N

Allowable Loading Moment

Mx	4.75 N·m
Му	4.75 N⋅m
Mz	4.75 N·m

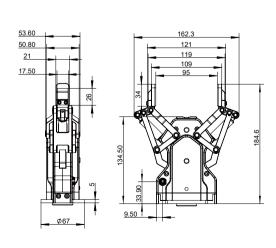
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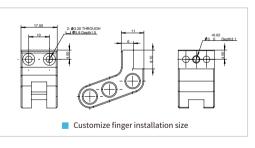
Parameters

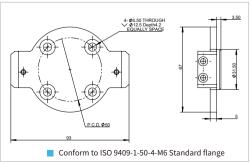
Product Parameter		
Gripping force (per jaw)		45~160 N
Stroke		95 mm
Recommended workpie	ce weight * ^①	3 kg
Opening/closing time		0.9 s/0.9 s
Repeat accuracy (position	on)	\pm 0.03 mm
Noise emission		< 50 dB
Weight		1 kg
Driving method	Screw drive	+ Linkage system
Size	184.6 mm x 1	62.3 mm x 67 mm

Working Envi	ronment	
Communication interface		rd: Modbus RTU (RS485), Digital I/O 2.0, CAN2.0A, PROFINET, EtherCAT *②
Rated voltage		24 V DC \pm 10%
Rated current		0.8 A
Peak current		1.5 A
IP class		IP 54
Recommended	d environment	0~40°C, under 85% RH
Certification		CE, FCC, RoHS

•	•	•	0	•	•	•
Build-in	Gripping Force	Position	Speed	Drop	Plug &	Self-locking
Controller	Adjustable	Adjustable	Adjustable	Detection	Play	Mechanism







 $[\]ensuremath{^*}\xspace$ Use optional communication, need external communication conversion box, please consult the sales staff for details

AG-105-145



Static Vertical Allowable Load

Fz	300 N

Allowable Loading Moment

Mx	1.95 N⋅m
Му	1.95 N·m
Mz	1.95 N⋅m

 $^{^*\}mbox{\Large \hsuremath{\textcircled{\hsuremath{\ooff}}}}$ It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

Parameters

Product Parameter		
Gripping force (per jaw)	35~105 N
Stroke		145 mm
Recommended workpi	ece weight * ^①	2 kg
Opening/closing time		0.9 s/0.9 s
Repeat accuracy (posit	ion)	\pm 0.03 mm
Noise emission		< 50 dB
Weight		1.3 kg
Driving method	Screw drive	+ Linkage system
Size	203.9 mm x 21	.2.3 mm x 67 mm

Working Envi	ronment	
Communication interface		l: Modbus RTU (RS485), Digital I/O 0, CAN2.0A, PROFINET, EtherCAT *©
Rated voltage		24 V DC \pm 10%
Rated current		0.8 A
Peak current		1.5 A
IP class		IP 54
Recommended	d environment	0~40°C, under 85% RH
Certification		CE, FCC, RoHS

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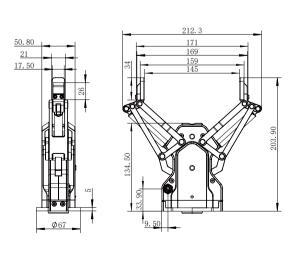
Build-in Controller

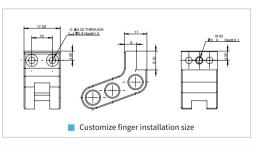
Gripping Force
Adjustable A

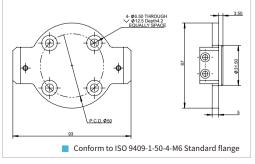
Position Adjustable

Speed Adjustable Drop Detection Plug & Play

Self-locking Mechanism







^{*}② Use optional communication, need external communication conversion box, please consult the sales staff for details

G Series

DH-3



Static Vertical Allowable Load

Fz 150 N

Allowable Loading Moment

Mx	2.5 N⋅m
Му	2 N·m
Mz	3 N·m

 $^{^*\}mbox{\Large (1)}$ It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

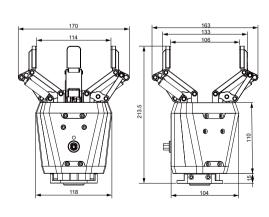
Parameters

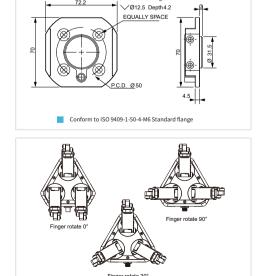
Product Parameter		
Gripping force (per jaw	v)	10~65 N
Stroke 10	06 mm (paralle	l) 122 mm (centric)
Recommended workp	iece weight *®	1.8 kg
Opening/closing time		0.7 s/0.7 s
Repeat accuracy (posi-	tion)	\pm 0.03 mm
Noise emission		< 50 dB
Weight		1.68 kg
Driving method		Screw nut + gear drive + linkage mechanism
Size	213.5 mm x	170 mm x 118 mm

	Working Environment	
	Communication interface	Standard: TCP/IP, USB2.0, CAN2.0A Optional: EtherCAT* ^②
	Rated voltage	24 V DC \pm 10%
_	Rated current	0.5 A
	Peak current	1 A
	IP class	IP 40
_	Recommended environment	0~40°C, under 85% RH
	Certification	CE, FCC, RoHS

•	•	•	0	0	•	•
Build-in	Gripping Force	Position	Speed	Drop	Plug &	Self-locking
Controller	Adjustable	Adjustable	Adjustable	Detection	Play	Mechanism

Technical Drawings





4-Ø 6.5 Through

 $^{^{\}star}$ ② Use optional communication, need external communication conversion box, please consult the sales staff for details

CG Series Electric Centric Gripper

CGE-10-10 CGI-100-170 CGC-80-10

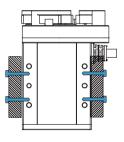


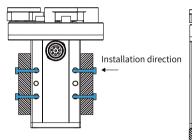
The CG series is a three-finger centric gripper independently developed by DH-Robotics. The three-finger gripping method can better cope with the grasping task of cylindrical workpieces. The CG series is available in a variety of models for a variety of scenarios, stroke and end devices.

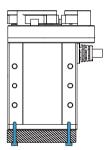


Installation

- 1. Front and rear installation: use front and rear screw holes for installation
- 2. Side installation: use side screw holes for installation
- 3. Bottom installation: use bottom screw holes for installation







Product Features

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 instantaneous overload protection



Application

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

CGE-10-10



Static Vertical Allowable Load

Fz 150 N

Allowable Loading Moment

Mx	0.62 N·m
Му	0.62 N·m
Mz	0.62 N·m

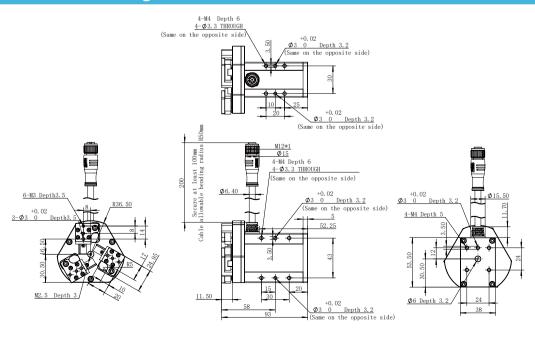
 $^{^*\}mbox{\footnote{$^{\circ}$}}$ It depends on the shape of the grasping object, the material and friction of the contact surface, and the acceleration of the motion, If you have any questions, please contact us.

Parameters

Product Parameter	
Gripping force (per jaw)	3~10 N
Stroke	10 mm
Recommended workpiece w	eight * [®]
Opening/closing time	0.3 s/0.3 s
Repeat accuracy (position)	\pm 0.03 mm
Noise emission	< 40 dB
Weight	0.43 kg
Driving method Precise planeta	ary gear reducer + Rack and pinion
Size	94 mm x 53.5 mm x 38 mm

Working Envi	ronment	
Communication interface	Standa Optional: TCP/IP, USB	rd: Modbus RTU (RS485), Digital I/O 2.0, CAN2.0A, PROFINET, EtherCAT *②
Rated voltage		24 V DC \pm 10%
Rated current		0.3 A
Peak current		0.6 A
Recommende	d environment	0~40°C, under 85% RH
Certification		CE, FCC, RoHS

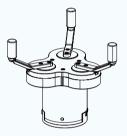
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Build-in	Gripping Force	Position	Speed	Drop	Self-locking
Controller	Adjustable	Adjustable	Adjustable	Detection	Mechanism



 $^{^{\}star}$ ② Use optional communication, need external communication conversion box, please consult the sales staff for details

CGI-100-170





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.

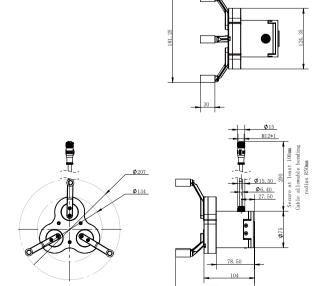
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- * ② Use optional communication, need external communication conversion box, please consult the sales staff for details

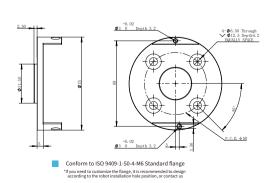
Parameters

Product Parameter	
Gripping force (per jaw)	30~100 N
Recommended workpiece diameter (inward)	ф40~ф170 mm
Recommended workpiece weight * ⁰	1.5 kg
Opening/closing time	0.5 s/0.5 s
Repeat accuracy (position)	\pm 0.03 mm
Noise emission	< 50 dB
Weight	1.5 kg
Driving method Precise planetary gears	+ Rack and pinion
Size 158.4 mm x 124.35 mm x 116 mm(without brake,	with brake, same size)

Working Envi	ronment	
Communication interface	Stand Optional: TCP/IP, US	lard: Modbus RTU (RS485), Digital I/O B2.0, CAN2.0A, PROFINET, EtherCAT *®
Rated voltage		24 V DC \pm 10%
Rated current		0.4 A
Peak current		1 A
IP class		IP 40
Recommende	d environment	0~40°C, under 85% RH
Certification		CE, FCC, RoHS

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





CGC-80-10



Static Vertical Allowable Load

Fz 200 N

Allowable Loading Moment

Mx	2.5 N·m
Му	2 N·m
Mz	3 N⋅m

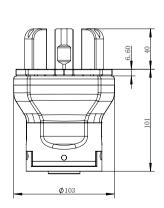
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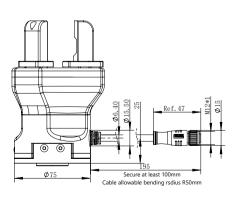
Parameters

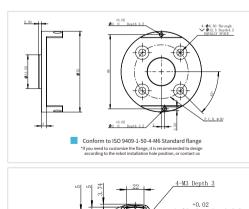
Product Parameter		
Gripping force (per jaw)		20~80 N
Single jaw		10 mm
Recommended workpiece w	⁄eight * [⊕]	1.5 kg
Opening/closing time		0.2 s/0.2 s
Repeat accuracy (position)		\pm 0.03 mm
Noise emission		< 50 dB
Weight		1.5 kg
Driving method Precise planet	ary gear reducer + I	Rack and pinion
Size	141 mm x 103 i	mm x 75 mm

WOI KING LIIVI	omment	
Communication interface	Standaı Optional: TCP/IP, USB2	rd: Modbus RTU (RS485), Digital I/O 2.0, CAN2.0A, PROFINET, EtherCAT *②
Rated voltage		24 V DC \pm 10%
Rated current		0.3 A
Peak current		1 A
IP class		IP 67
Recommende	d environment	0~40°C, under 85% RH
Certification		CE, FCC, RoHS

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







 $^{^*}$ ② Use optional communication, need external communication conversion box, please consult the sales staff for details

Honors and Certificates

- Some of Our Certificates

















TEST REPORT

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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

6 7

Our Customers

More than 500 customers around the world are using DH-Robotics products The number of customers continues to grow rapidly...













































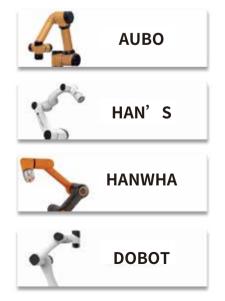


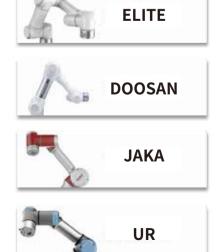




Our Eco-Partners

DH-Robotics is a high-quality partner of global collaborative robots





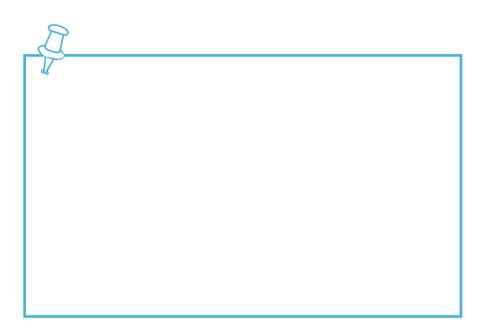


DH-ROBOTICS

is committed to provide first-class core components of precision motion control.







DH-Robotics Technology Co.,Ltd.



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