

# PGC Series Electric Collaborative Parallel Gripper

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

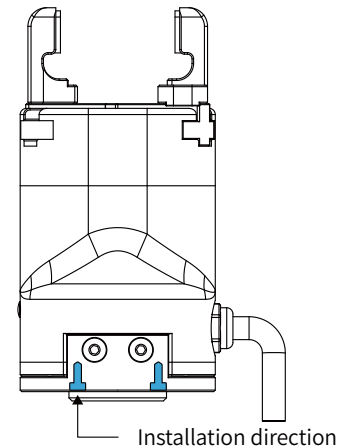


DH-Robotics PGC series of collaborative parallel electric grippers is an electric gripper mainly used in cooperative manipulators. It has the advantages of high protection level, plug and play, large load and so on. The PGC series combines precision force control and industrial aesthetics. In 2021, it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

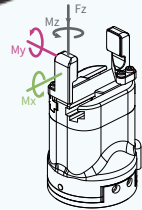
## Application

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.



## Parameters

Product Parameter						
Gripping force (per jaw)	15~50 N					
Stroke	35 mm					
Recommended workpiece weight *	1 kg					
Opening/Closing time	0.7 s/0.7 s					
Repeat accuracy (position)	± 0.03 mm					
Noise emission	< 50 dB					
Weight	0.5 kg					
Driving method	Precise planetary gears + Rack and pinion					
Size	124 mm x 63 mm x 63 mm					
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 ± 10%					
Rated current	0.25 A					
Peak current	0.5 A					
IP class	IP 54					
Recommended environment	0~40°C, under 85% RH					
Certification	CE, FCC, RoHS					



### Vertical Maximum Force

**Fz:** 150 N

### Allowable Moment

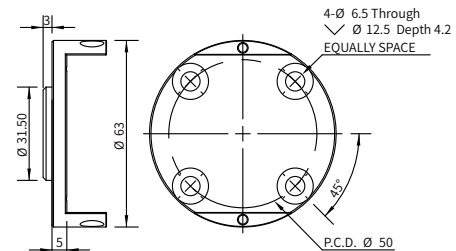
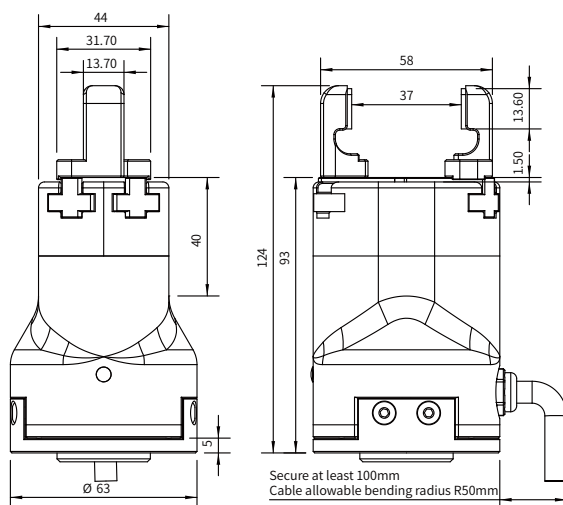
**Mx:** 2.5 N·m

**My:** 2 N·m

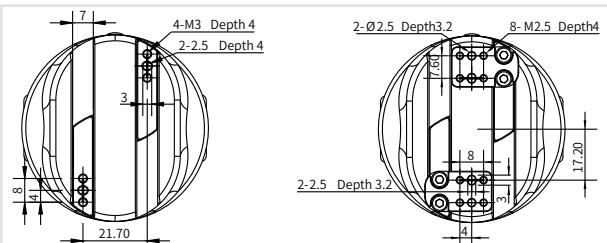
**Mz:** 3 N·m

\*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.

## Technical Drawings



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










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

# PGC-140-50

Electric Collaborative Parallel Gripper

## 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)	± 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	Standard: Modbus RTU (RS485), Digital I/O Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT					
Rated voltage	24 V DC ± 10%					
Rated current	0.4 A					
Peak current	1 A					
IP class	IP 67					
Recommended environment	0~40°C, under 85% RH					
Certification	CE, FCC, RoHS					
						



### Vertical Maximum Force

**Fz:** 300 N

### Allowable Moment

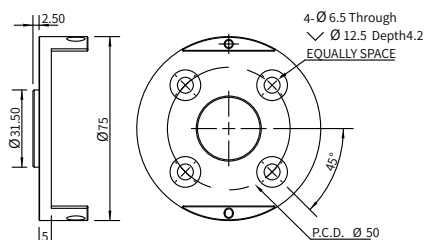
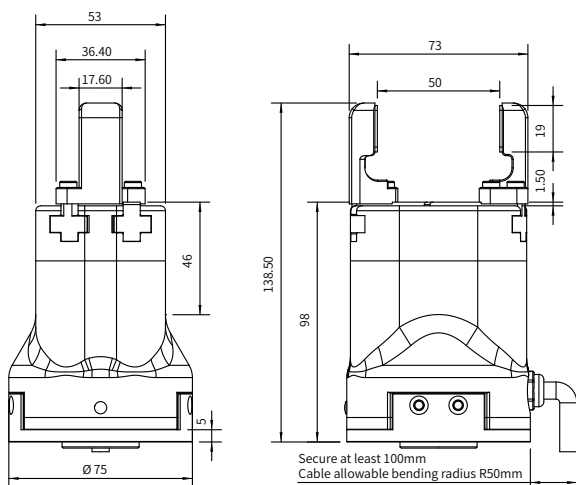
**Mx:** 7 N·m

**My:** 7 N·m

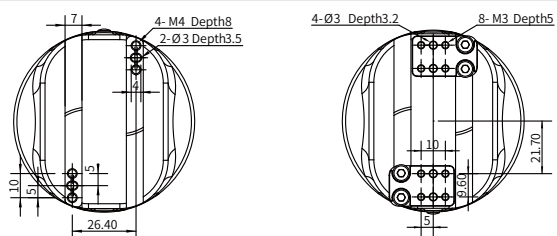
**Mz:** 7 N·m

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## Technical Drawings










■ Conform to ISO 9409-1-50-4-M6 Standard flange  
If you need to customize the flange, it is recommended to design according to the robot installation hole position, or contact us

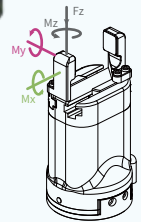


■ Rail mounting holes

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

## Parameters

Product Parameter						
Gripping force (per jaw)	40~300 N					
Stroke	60 mm					
Recommended workpiece weight *	6 kg					
Opening/Closing time	0.8 s/0.8 s					
Repeat accuracy (position)	± 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 Environment						
Communication interface	Standard: Modbus RTU (RS485), Digital I/O Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT					
Rated voltage	24 V DC ± 10%					
Rated current	0.4 A					
Peak current	2 A					
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



### Vertical Maximum Force

**Fz:** 600 N

### Allowable Moment

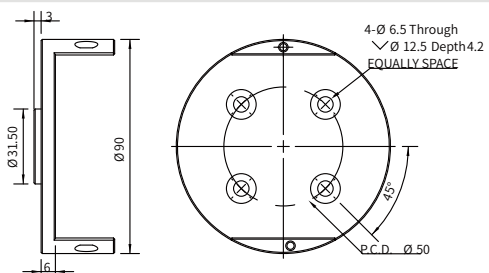
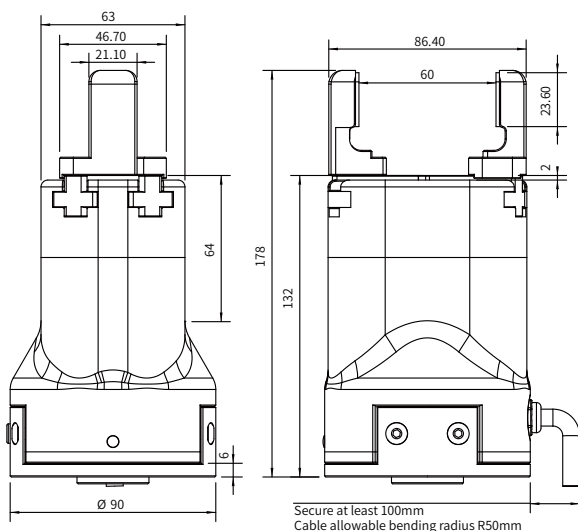
**Mx:** 15 N·m

**My:** 15 N·m

**Mz:** 15 N·m

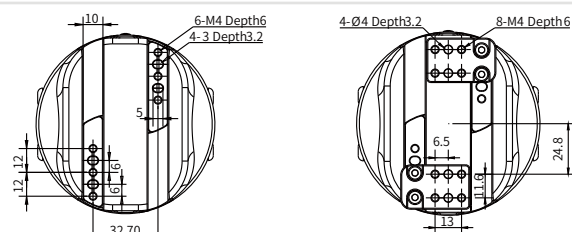
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## Technical Drawings



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

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■ Rail mounting holes

■ Custom finger mounting size

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