

PGC Series

Electric Collaborative Parallel Gripper



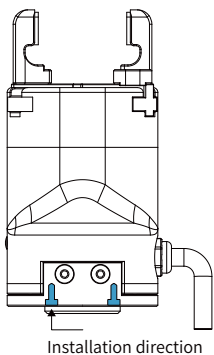
PGC-50-35
PGC-140-50
PGC-300-60

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

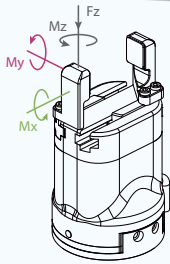
The gripping force of the PGC series could reach 300 N, and the maximum load can reach 6 kg, which can meet more diverse gripping needs.



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.

PGC-50-35



Static Vertical Allowable Load

Fz 150 N

Allowable Loading Moment

Mx 2.5 N·m

My 2 N·m

Mz 3 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.

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

Parameters

Product Parameter

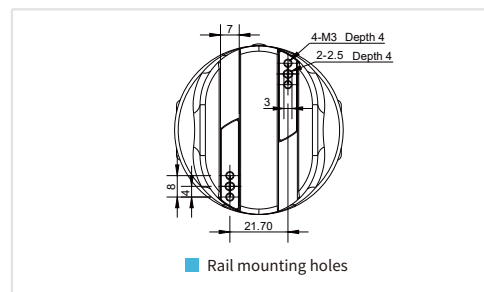
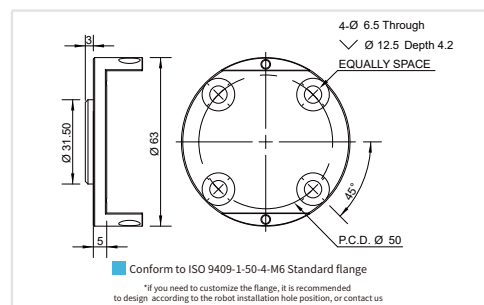
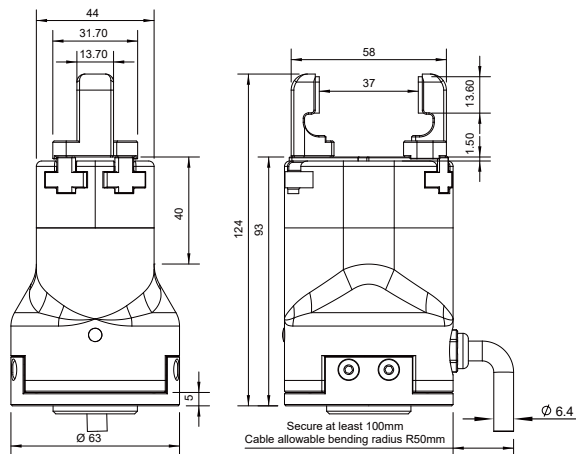
| | |
|---|---|
| Gripping force (per jaw) | 15~50 N |
| Stroke | 37 mm |
| Recommended workpiece weight * ^① | 1 kg |
| Opening/closing time | 0.7 s/0.7 s |
| Repeat accuracy (position) | ± 0.03 mm |
| Noise emission | < 50 dB |
| Weight | 0.5 kg |
| Driving method | Precise planetary gears + Rack and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

Working Environment

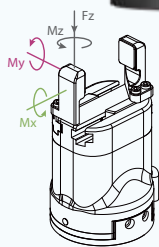
| | |
|-------------------------|---|
| Communication interface | Standard: Modbus RTU (RS485), Digital I/O Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT * ^② |
| Rated voltage | 24 V DC ± 10% |
| Rated current | 0.25 A |
| Peak current | 0.5 A |
| IP class | IP 54 |
| Recommended environment | 0~40°C, under 85% RH |
| Certification | CE, FCC, RoHS |

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

Technical Drawings



PGC-140-50



Static Vertical Allowable Load

Fz 300 N

Allowable Loading Moment

Mx 7 N·m

My 7 N·m

Mz 7 N·m

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Parameters

Product Parameter

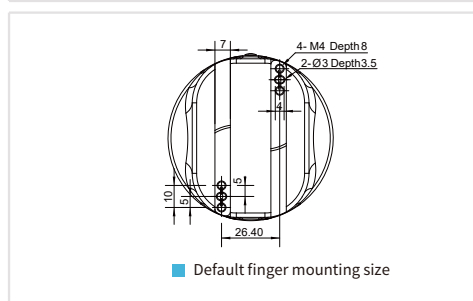
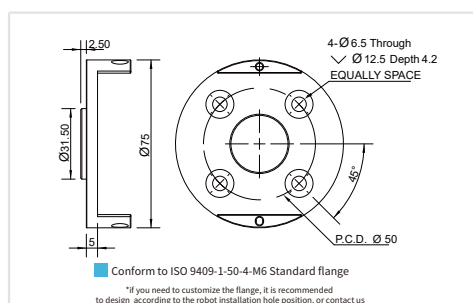
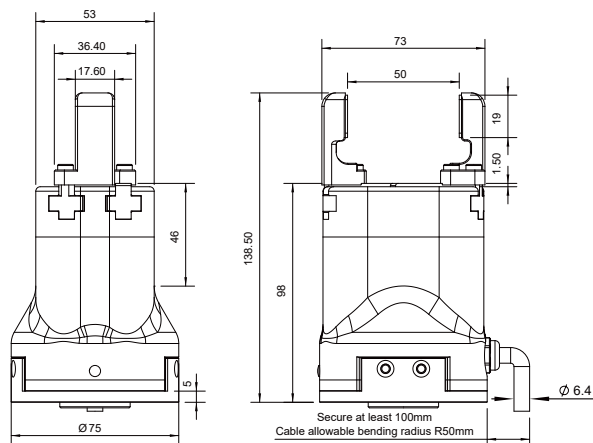
| | |
|---------------------------------|---|
| Gripping force (per jaw) | 40~140 N |
| Stroke | 50 mm |
| Recommended workpiece weight *① | 3 kg |
| Opening/closing time | 0.6 s/0.6 s |
| Repeat accuracy (position) | ± 0.03 mm |
| Noise emission | < 50 dB |
| Weight | 1 kg |
| Driving method | Precise 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 *② |
| Rated voltage | 24 V DC ± 10% |
| Rated current | 0.4 A |
| Peak current | 1.0 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 |
|-----------------------|-----------------------------|-----------------------|--------------------|------------------|---------------|--------------------------|

Technical Drawings



PGC-300-60



Static Vertical Allowable Load

Fz 600 N

Allowable Loading Moment

Mx 15 N·m

My 15 N·m

Mz 15 N·m

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Parameters

Product Parameter

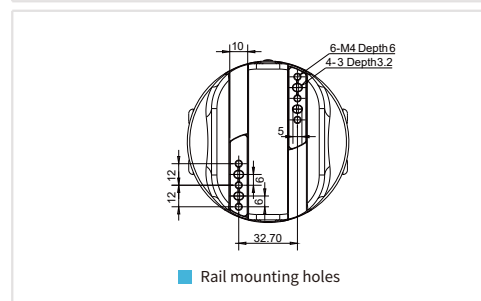
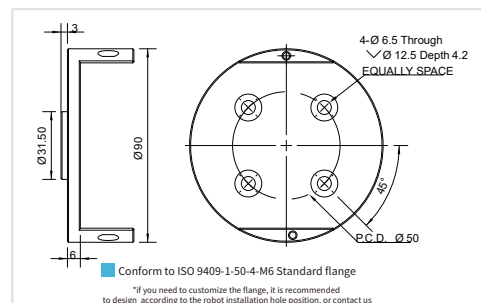
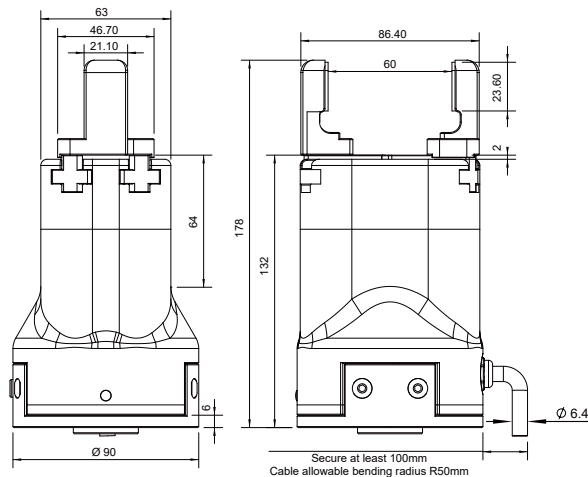
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|---|---|
| Gripping force (per jaw) | 80~300 N |
| Stroke | 60 mm |
| Recommended workpiece weight * ^① | 6 kg |
| Opening/closing time | 0.8 s/0.8 s |
| Repeat accuracy (position) | ± 0.03 mm |
| Noise emission | < 50 dB |
| Weight | 1.5 kg |
| Driving 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 * ^② |
| Rated voltage | 24 V DC ± 10% |
| Rated current | 0.4 A |
| Peak current | 2.0 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 |
|-----------------------|-----------------------------|-----------------------|--------------------|------------------|---------------|--------------------------|

Technical Drawings



PGE Series

RGI Series

RGD Series

PGI Series

PGS Series

PGC Series

AG Series

CG Series