PGC Series Fredot winner 2021 Electric Collaborative Parallel Gripper

PGC-50-35

PGC-140-50

PGC-300-60

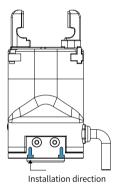


DH-Robotics PGC series of collaborative parallel electric grippers is an electric gripper mainly used in cooperative manipulators. It has the advantages of high protection level, plug and play, large load and so on. The PGC series combines precision force control and industrial aesthetics. In 2021, it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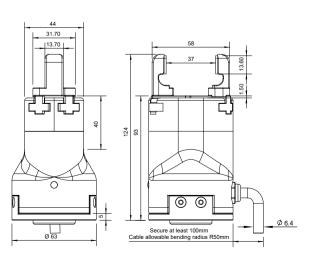
Parameters

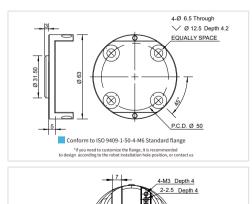
Product Parameter	
Gripping force (per jaw)	15~50 N
Stroke	37 mm
Recommended workpiece weight **	1 kg
Opening/closing time	0.7 s/0.7 s
Repeat accuracy (position)	\pm 0.03 mm
Noise emission	< 50 dB
Weight	0.5 kg
Driving method Precise planetary gear	s + Rack and pinion
Size 124 mm	x 63 mm x 63 mm

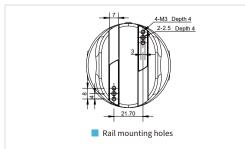
Working Environment			
Communication interface		rd: Modbus RTU (RS485), Digital I/O 2.0, CAN2.0A, PROFINET, EtherCAT *②	
Rated voltage		24 V DC \pm 10%	
Rated current		0.25 A	
Peak current		0.5 A	
IP class		IP 54	
Recommende	d environment	0~40°C, under 85% RH	
Certification		CE, FCC, RoHS	

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

Technical Drawings







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

PGC-140-50



Static Vertical Allowable Load

Fz	300	N

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.

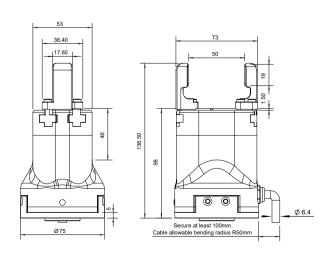
Parameters

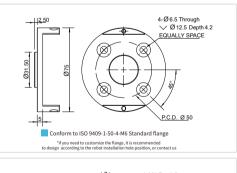
ter	
erjaw)	40~140 N
	50 mm
orkpiece weight * [®]	3 kg
time	0.6 s/0.6 s
(position)	\pm 0.03 mm
	< 50 dB
	1 kg
Precise planetary gears	+ Rack and pinion
138.5 mm x	75 mm x 75 mm

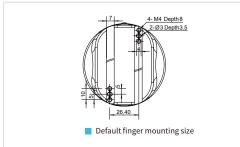
Working Environment					
Communication interface		d: Modbus RTU (RS485), Digital I/O .0, CAN2.0A, PROFINET, EtherCAT *②			
Rated voltage		24 V DC \pm 10%			
Rated current		0.4 A			
Peak current		1.0 A			
IP class		IP 67			
Recommende	d environment	0~40°C, under 85% RH			
Certification		CE, FCC, RoHS			

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

Technical Drawings







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

PGC-300-60



Static Vertical Allowable Load

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Allowable Loading Moment

Mx	15 N⋅m
Му	15 N·m
Mz	15 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.

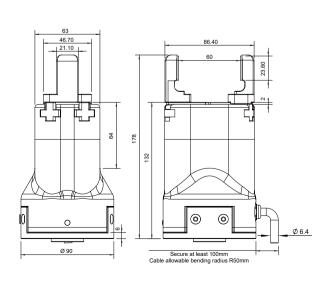
Parameters

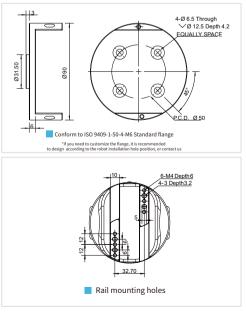
Product Parameter			
Gripping force (per jaw)	80~300 N		
Stroke	60 mm		
Recommended workpiece weight * [©]	6 kg		
Opening/closing time	0.8 s/0.8 s		
Repeat accuracy (position)	\pm 0.03 mm		
Noise emission	< 50 dB		
Weight	1.5 kg		
Driving method Precise planetary gears +	Precise planetary gears + Rack 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 \pm 10%				
Rated current		0.4 A				
Peak current		2.0 A				
IP class		IP 67				
Recommended	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

Technical Drawings





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