RGI Series Electric Rotary Gripper

RGI-35-14 RGI-100-14 RGI-35-30 RGI-100-30

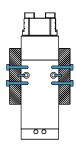


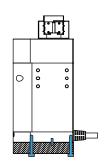
RGI series is the first fully self-developed infinite rotating gripper with a compact and precise structure on the market. It is widely applied in medical automation industry to grip and rotate the test tubes as well as other industries like electronics and New energy industry.

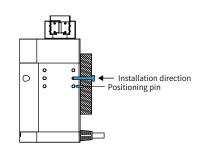


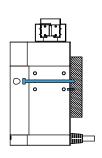
Installation

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









Product Features

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.

Compact | Double ServoSystem

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

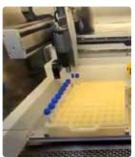
High Repeat Accuracy

The repeatability accuracy of rotation reaches ± 0.02 degree, and the repeatability accuracy of position reaches ± 0.02 mm. Through 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, scanning code detection, etc.; 3C electronics, packaging automation, new energy industry positioning assembly, deviation correction and other scenarios.





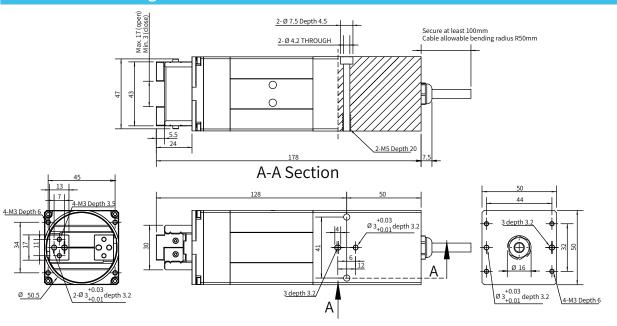
RGI-35-14

Product Paramet	ter			
Gripping force (pe		10~35 N		
Stroke	Stroke			14 mm
Rated torque			0.2	5 N·m
Peak torque			0.	4 N·m
Rotary range			Infinite Ro	otating
Recommended workpiece weight * 0.7 kg				0.7 kg
Max. rotation speed 1500 de			deg/s	
Repeat accuracy (swiveling) \pm 0.02 de			02 deg	
Repeat accuracy (position) ± 0.02 mm			02 mm	
Opening/Closing time 0.3 s/0.3			s/0.3 s	
Weight 1.0 k			1.0 kg	
Size 178 mm x 50 mm x 50 mm				
Working Environ	ment			
Communication interface Standard: Modbus RTU (RS485), Digital I/C Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCA				
Rated voltage $24 \text{V DC} \pm 10\%$				
Rated current 1.1 A			1.1 A	
Peak current 2 A				2 A
IP class IP 40				IP 40
Recommended environment 0~40°C, under 85% RH				5% RH
Certification CE, FCC, RoHS			, RoHS	
Build-in Gripping Force Controller Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Self-locking Mechanism



Vertical Maximu	ım Force		
Fz:	150 N		
Allowable Mom	ent		
Mx:	2 N⋅m		
My:	1.5 N·m		
Mz:	2.5 N·m		

 $^{^{*}}$ lt 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.

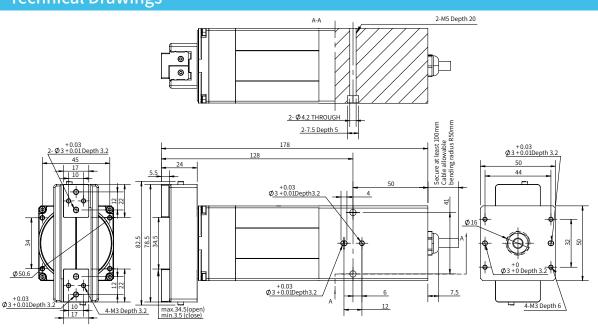


Product	Paramet	er				
Gripping	Gripping force (per jaw)			10~35 N		
Stroke	Stroke			30 mm		
Rated tor	rque			0.2	25 N·m	
Peak tord	que			0.4 N·m		
Rotary ra	nge			Infinite Rotating		
Recommended workpiece weight * 0.7 kg					0.7 kg	
Max. rotation speed 1500 deg				O deg/s		
Repeat accuracy (swiveling) ± 0.02 deg				.02 deg		
Repeat accuracy (position) ± 0.02 mm				02 mm		
Opening,	Opening/Closing time 0.3 s/0.3			s/0.3 s		
Weight 1.2 kg				1.2 kg		
Size	Size 178 mm x 50 mm x 50 mm					
Working	Environ	ment				
Communica	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%					± 10%	
Rated cu	Rated current 1.1 A					
Peak current 2 A					2 A	
IP class	IP class IP 40				IP 40	
Recomm	ended er	vironment	0~40	0°C, under 8	35% RH	
Certificat	tion			CE, FCC	C, RoHS	
Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Self-locking Mechanism	



Vertical Maximui	m Force	
Fz:	150 N	
Allowable Mome	nt	
Mx:	2 N·m	
My:	1.5 N·m	
Mz:	2.5 N⋅m	

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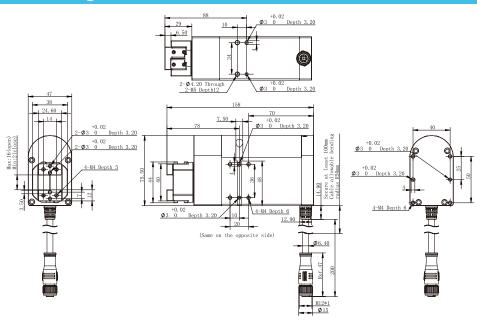
RGI-100-14

Produ	ct Paramet	er			
Gripping force (per jaw) 30~100 N			~100 N		
Stroke					14 mm
Rated t	orque			0	.5 N·m
Peak to	orque			1	.5 N·m
Rotary range Infinite Rotating			otating		
Recommended workpiece weight * 1.5 kg				1.5 kg	
Max. ro	Max. rotation speed 1080 deg/s			0 deg/s	
Repeat accuracy (swiveling) \pm 0.02 deg				.02 deg	
Repeat accuracy (position) \pm 0.02 mm				02 mm	
Opening/Closing time 0.8 s/0.8 s			s/0.8 s		
Weight 1.28 kg			1.28 kg		
Size	158 mm x 75.5 mm x 47 mm				
Worki	ng 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 1 A				1 A	
Peak current 3 A				3 A	
IP class IP 40					
Recommended environment 0~40°C, under 85% RH			35% RH		
Certific	cation			CE, FCC	C, RoHS
Build-in Controller	Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Self-locking Mechanism



orce
150 N
2.5 N·m
3 N·m
4 N·m

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RGI-100-30

Product Paramet	er				
Gripping force (per jaw) 30~100 N			~100 N		
Stroke			30 mm		
Rated torque			0.5 N⋅m		
Peak torque			1	.5 N·m	
Rotary range Infinite Rotating			otating		
Recommended workpiece weight * 1.5 kg					
Max. rotation speed 1080 deg/s			0 deg/s		
Repeat accuracy (swiveling) \pm 0.02 deg			.02 deg		
Repeat accuracy (position) ± 0.02 mm				.02 mm	
Opening/Closing time 0.8 s/0.8 s			s/0.8 s		
Weight 1.5 kg			1.5 kg		
Size	Size 158 mm x 75.5 mm x 47 mm				
Working Environ	ment				
Communication interface Standard: Modbus RTU (RS485), Digital I/O Optional: TCP/IP, USB2.0, CAN2.0A, PROFINET, EtherCAT					
Rated voltage $24 \text{ V DC} \pm 10\%$					
Rated current 1 A			1 A		
Peak current 3 A				3 A	
IP class IP 40				IP 40	
Recommended er	nvironment	0~40	0°C, under 8	35% RH	
Certification			CE, FCC	C, RoHS	
Build-in Gripping Force Adjustable	Position Adjustable	Speed Adjustable	Drop Detection	Self-locking Mechanism	



Vertical Maximum Force			
Fz:	150 N		
Allowable Moment			
Mx:	2.5 N⋅m		
My:	3 N·m		
Mz:	4 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.

