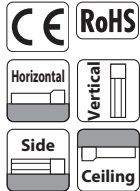


# GRS-SEG/SIG

Body width **26mm** O.D. grip I.D. grip Solenoid Gripper

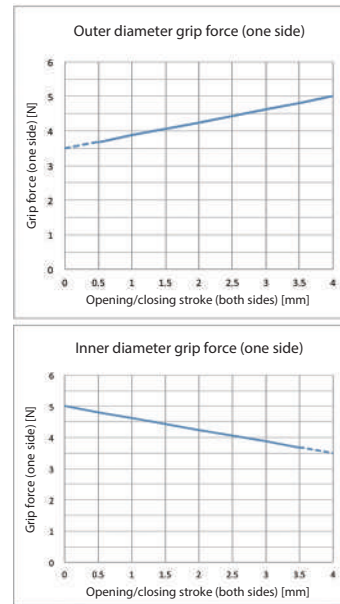
## Model Specification Items

<b>GRS</b>	-		-	<b>4</b>	-		-		-	
Series	Type	Stroke	Driver box	Solenoid gripper cable length	Options					
SEG	Outer diameter grip	4: 4mm (2mm per side)	DBN Driver box (NPN specification)	N None	Refer to Options table below.					
SIG	Inner diameter grip		DBP Driver box (PNP specification)	P 1m						
			N No driver box	S 3m						
				M 5m						
				X□□ Specified length						



- POINT Selection Notes**
- (1) For outer diameter grip, it opens when conductive and closes when not conducting (normally closed). For inner diameter grip, it closes when conductive and opens when not conducting (normally open).
  - (2) Since a spring is used for the grip mechanism, the grip force changes depending on the open/closing stroke of the fingers.
  - (3) To operate the solenoid gripper, a driver box is essential. Please refer to P.8 for specification details.
  - (4) Please refer to P.9 for gripper selection.

## Correlation Diagram of Grip Force and Opening/Closing Stroke



(Note) The grip force changes depending on the open/closing stroke of the fingers.

## Actuator Specifications

Model	Grip direction	Max grip force (N)	Stroke (mm)
GRS-SEG-4-①-②-③	Outer diameter	10 (5 per side)	4 (2 per side)
GRS-SIG-4-①-②-③	Inner diameter		

Legend ① Driver box ② Cable length ③ Option

## Stroke and Operation Time

Stroke (mm)	Operating time [Open/close] (s)
4	0.03 or less

## Solenoid gripper cable length

Type	Solenoid gripper cable code
Standard type	P(1m)
	S(3m)
	M(5m)
Specified length	X06(6m) ~ X10(10m)
	X11(11m) ~ X15(15m)

\* Robot cable specification option is not available.

## Option

Name	Option code	Reference page
Actuator cable (pigtail cable) length: 2 m	<b>AC2</b>	See P.7
Actuator cable (pigtail cable) length: 5 m	<b>AC5</b>	
Cable exit direction (Top)	<b>CJT</b>	
Sensor attached x 1 (NPN specification) (*1)	<b>S1N</b>	
Sensor attached x 2 (NPN specification) (*1)	<b>S2N</b>	
Sensor attached x 1 (PNP specification) (*1)	<b>S1P</b>	
Sensor attached x 2 (PNP specification) (*1)	<b>S2P</b>	
Rubber cover attached (chloroprene rubber)	<b>RCH</b>	
Rubber cover attached (silicone rubber)	<b>RSL</b>	

(\*1) Driver box: for DBN, only S1N and S2N can be selected.  
Driver box: for DBP, only S1P and S2P can be selected.

## Actuator Specifications

Item	Description
Max grip force	10N, one side 5N
Operating time	0.03s or less
Operation frequency	120CPM
Mass	0.16kg

CPM: Cycle per minute

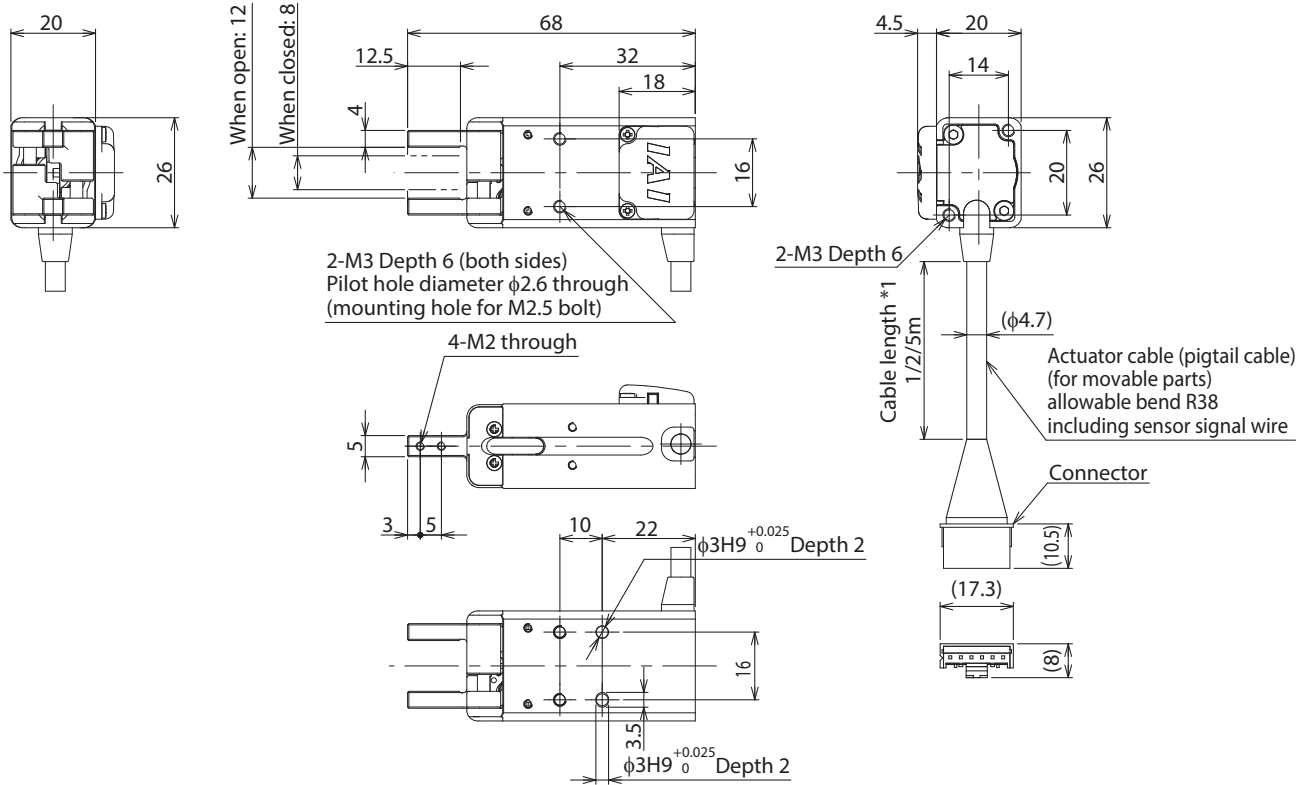
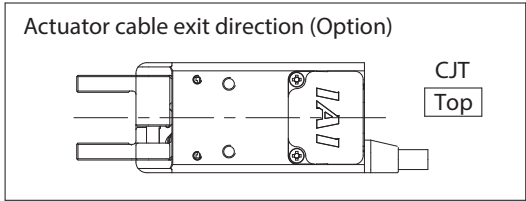
Item	Description
Drive system	Grip mechanism (chuck): Compression spring + cam mechanism Release mechanism (unchuck): Solenoid electromagnetism + cam mechanism
Repeatability	±0.1mm
Backlash	One side 0.5mm or less
Finger guide	Slide guide
Ambient operating temp. & humidity	0 to 40°C, 85% RH or less (Non-condensing)
Degree of protection	IP20
Vibration resistance / shock resistance	4.9m/s <sup>2</sup> 100Hz or less
Compliant international standards	CE marking, RoHS Directive
Delivery date	Indicated in "Check Delivery Date" on the website

Dimensions

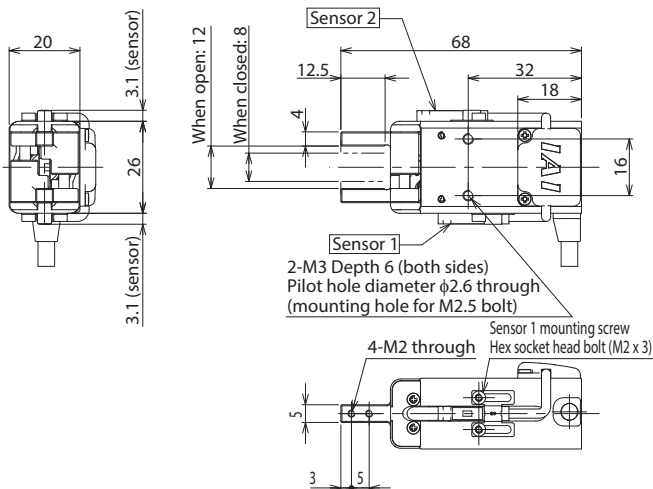
CAD drawings can be downloaded from our website.  
www.intelligentactuator.com



\*1 The actuator cable (pigtail cable) is a robot cable.  
The actuator cable (pigtail cable) standard length is 1m.  
Can be changed to 2m or 5m as an option (model: AC2/AC5).



Sensor attached (option)



Rubber cover attached (option)

