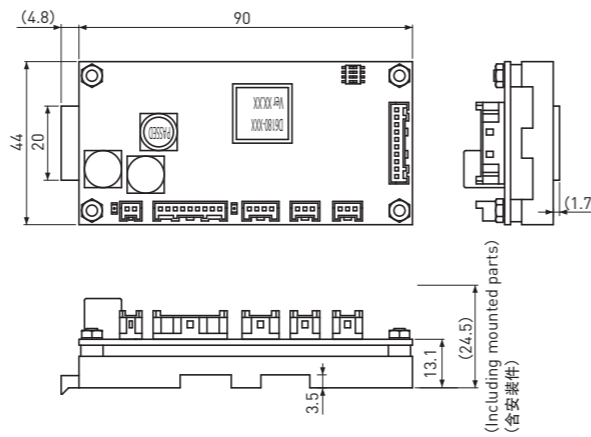


### ●驱动器 / Driver

D6180的参数以及特长

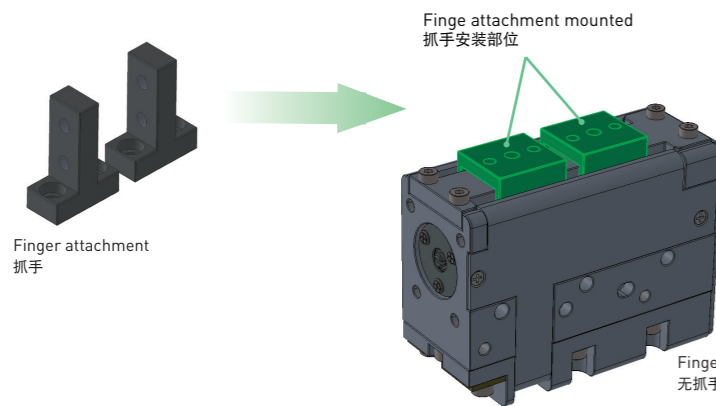
- 电源电压DC24V(容量1A)
- 通过输入以下3点可以实现夹持动作  
原点复位、夹持动作、待机位置动作
- 准备输出以下3点  
原点复位完成、夹持完成、报警
- 对应RS485通信协议
- 准备专用的APP (软件)
- 可以安装DIN滑轨



### Specifications & Features of D6180

- Power supply voltage DC24V (capacity 1A).
- Gripping operation is possible with 3 inputs;  
Return to origin, gripping operation, standby position operation.
- Preparing 3 outputs;  
Completion of return to origin, gripping, and warning alarm.
- RS485 serial communication.
- Special application (software) is available.
- This can be mounted on a DIN rail.

### ●抓手选项 / Optional Finger Attachment



根据客户的使用要求，可以提供如左图所示无抓手型。此外，也可以作为抓手安装部位使用。

As your request, we can provide Finger-less type Gripper as shown in figure left as well as Finger attachment.

### ●模组选项 / Optional Module (近日发售 / Coming soon)

带有编码器的中空电机和电动夹爪进行组合，实现【旋转+抓取模组】。

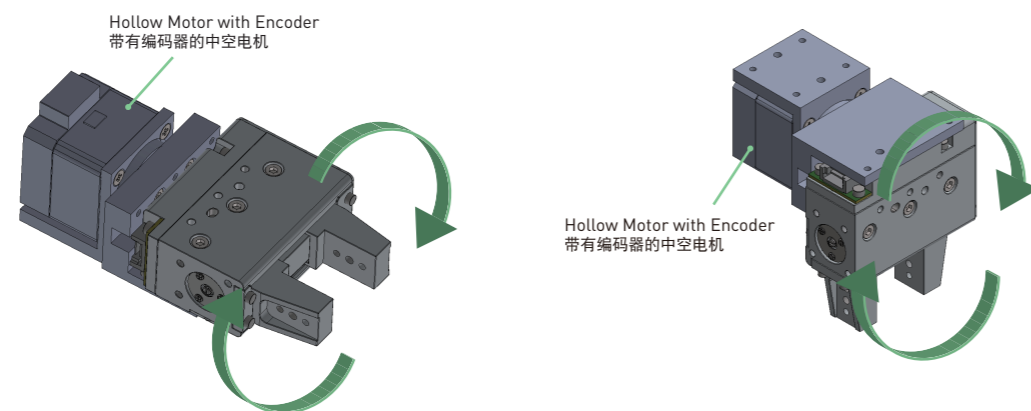
电动夹爪的链接配线可以穿过中空电机的中空轴，实现配线的可动性和简洁性。

选择电动夹爪的安装方向，针对旋转轴可以选择夹取方向。

"Rotary + Grip Module" that combines a Hollow Motor with an Encoder and an Electric Gripper.

Passing the connection cable of the Electric Gripper through the Hollow shaft of the Hollow Motor simplifies the cable wiring.

The mounting direction of the electric Gripper can be selected, and the gripping direction for the rotation axis can be selected.



ケーエス KSS Advanced Technology of "Miniature"

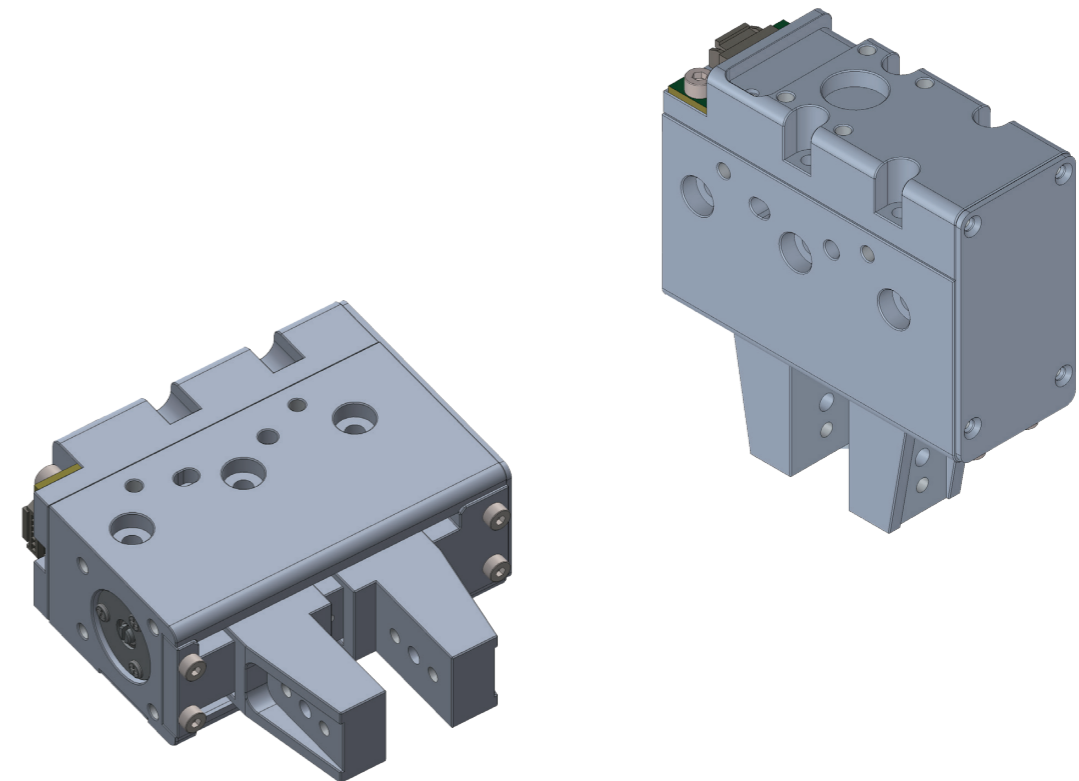
RoHS

NEW 新产品

# 紧凑型电动夹爪 Compact Electric Gripper

CGS系列  
CGS Series

Vol.29.0

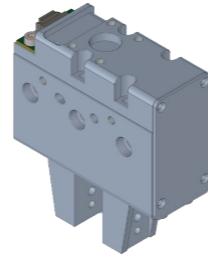


使用KSS世界最小级左右旋滚珠丝杆实现轻量化、紧凑型的电动夹爪。

Lightweight and compact Electric Gripper that uses the world's smallest class Bi-directional Ball Screw from KSS.

# 紧凑型电动夹爪 Compact Electric Gripper

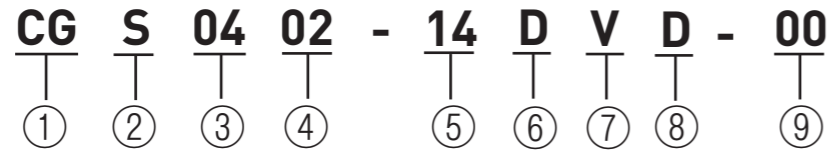
CGS系列  
CGS Series



## ● 特长 / Features

- 利用KSS微型产品的生产技术与经验，实现小型化、轻量化。
- 使用滚珠丝杆、DC马达、光学尺进行组合，实现多点定位和力控功能。
- 安装面弹性灵活，从4个方向均可以安装。
- 采用客户可以实现定期维护的设计（电机和油脂更换）。
- 通过手动可以实现开闭动作。
- 可以实现对准中心和尺寸测量（需使用我司指定的驱动器）
- Utilize KSS miniature technology to achieve compactness and weight reduction.
- The combination of Ball Screw, DC Motor and Linear scale utilizes multi-point positioning drive and grip force control.
- It can be mounted from 4 sides as a flexible design
- This design enables customers to allow regular maintenance (Motor replacement, Greasing).
- Manual opening/closing operation is possible.
- Centering and dimensional measurement are possible (only with our designated Driver).

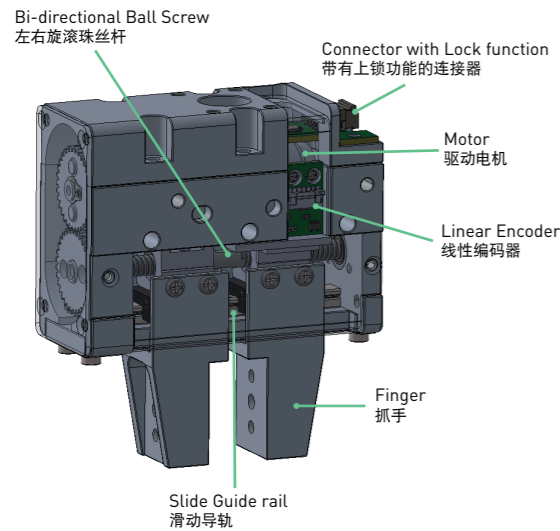
## ● 型号定义 / Model number notation



- ①系列型号  
CG:KSS紧凑型夹爪系列
- ②构造记号  
S:标准型
- ③滚珠丝杆外径  
04表示4mm
- ④滚珠丝杆导程 (mm)  
02表示2mm
- ⑤行程 (mm)
- ⑥电机识别番号  
D:DC马达
- ⑦抓手形状  
V:垂直抓手型  
H:无抓手型
- ⑧编码器出力  
D:线性驱动
- ⑨追加番号

- ①Series No.  
CGS : KSS Compact Gripper Series
- ②Actuator type  
S : Standard type
- ③Ball Screw Shaft Nominal diameter  
04 means 4mm
- ④Ball Screw Lead / Pitch (mm)  
02 means 2mm
- ⑤Stroke (mm)
- ⑥Motor type  
D : DC Motor
- ⑦Finger attachment type  
V : Vertical Finger type  
H : Finger-less type
- ⑧Encoder output  
D : Line driver
- ⑨Extra notation

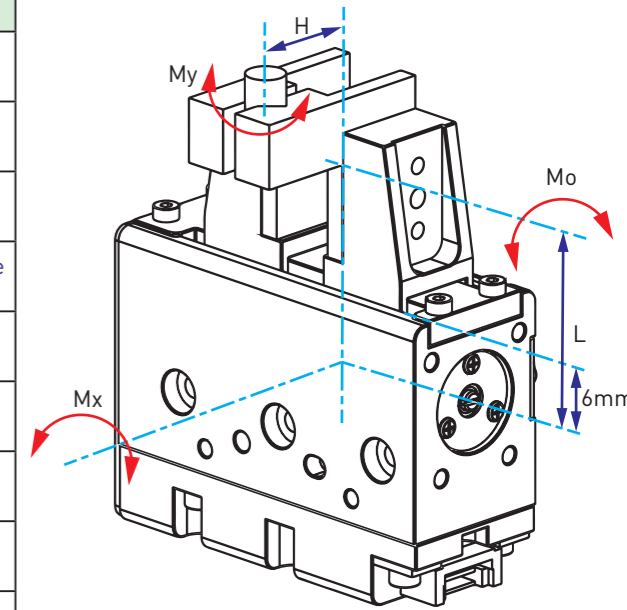
## ● 主要构成部品 / Main Components



| Main Components 主要构成物品 |   |
|------------------------|---|
| Types of Screw 滚珠丝杆    | Bi-directional Ball Screw (Φ4mm、Lead 2mm)<br>左右旋滚珠丝杆 (Φ4mm、导程2mm) |
| Sliding Guide 导轨       | Slide Guide rail 滑动导轨 (1列)  |
| Motor 驱动电机             | Coreless DC geared Motor 附带减速机的无核DC马达                             |
| Linear Encoder 线性编码器   | Incremental A, B phase (5V)<br>增量A相、B相(5V)                        |

## ● 规格 / Specifications

| General Specification / 一般规格     |                                  | Note / 备注                 |
|----------------------------------|----------------------------------|---------------------------|
| Gripping Force Range / 夹持力范围     | 2~20N                            | One side / 单侧             |
| Gripping Speed Range / 夹持速度范围    | 0.5~10mm/sec                     | One side / 单侧             |
| Positioning Speed Range / 定位速度范围 | 0.5~20mm/sec                     | One side / 单侧             |
| Stroke / 行程                      | 14mm                             | 7mm for one side<br>单侧7mm |
| Repeatability / 重复定位精度           | ±0.01mm                          | -                         |
| Mass / 重量                        | 180g<br>(Finger type)<br>(垂直抓手型) | Without cable<br>配线除外     |
| Lubrication 润滑                   | Ball Screw 滚珠丝杆                  | Grease MCG No.1           |
|                                  | Slide Guide Rail 滑动导轨            | Grease MULTEMP PS No.2    |
| Permissible Moment 偏心力矩容许值       | Mo                               | 0.98Nm                    |
|                                  | Mx                               | 0.56Nm                    |
|                                  | My                               | 0.47Nm                    |



### 注意事项

- 推力和最高速度等，请不要超过本司规格值使用。
  - 如果超过偏心力矩容许值使用时，容易出现动作不良或破损等情况，使用时请注意。
  - 紧凑型电动夹爪，需要涂油脂来进行维护。
- 关于涂油脂的周期，根据客户的使用环境，运转频度的不同而不同，约3个月确认一次油脂的情况，根据需要进行涂油脂作业。

### Precautions

- Do not use the Gripper exceeding our specifications in Load or Speed.
- Please note that using the Gripper in exceeding the maximum value of permissible moment cause the risk of malfunction or breakage.
- Greasing is required for this product. Maintenance cycle will be depending on your usage and working condition, however in general we recommend that you check the Grease condition in every 3 months, and if required please apply new Grease.

## ● 外观尺寸图 / Dimensions

