## **Ever-evolving components for ever-**



## evolving facilities

# 2-finger Gripper FLSH Series



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## CKD electric actuators bring "extra" features to air components.

Extra! Multipoint stopping Stopping is possible at multiple points.

Flexible production



## Extra! Shockless

Speed and pressing current can be set to any value to gently grip workpieces.

Improved tact, with no concerns about damage

Air component

FLSH Series

## Extra! Information output

Output the present position and speed, as well as the travel distance and number of operational cycles, etc.

Avoid equipment stops with IoT





## Inheriting the advantages of air components

## Realizing capacity equal to that of air components

Each series is capable of outputting power equivalent to that of air components.





Realizing the ease of use of air components

Can also be operated using the same sequence as the solenoid valve that controls air components.





## Reduces equipment adjustment time

Includes manual operation and self-lock mechanisms

A manual operation mechanism enabling tool-free operation is equipped on the front of the body. The finger position can be easily adjusted at equipment startup, and the self-lock enables retained workpieces to be easily mounted and detached.

#### Expanded selection

#### Dimensions equivalent to air products

This series has compatible mounting with the Air Hand LSH Series, allowing a wider range of options during the design phase. When multi-model workpiece handling is required, we recommend the FLSH Series.

<image>





## For short-stroke workpiece transport and positioning

#### Smaller equipment installation footprint

#### Built-in motor

The actuator contains a built-in motor. No protrusion or wrapping in the motor assembly, allowing space-saving equipment design.



#### Dimensional compatibility with air products

The body has dimensional compatibility with the air LCR Series, allowing compact, air-style design. The FLCR Series also enables arbitrary adjustment of acceleration/deceleration, rendering shock absorbers unnecessary.



#### Multi-point positioning

The FLCR Series enables positioning at arbitrary positions. Because a single actuator handles multi-model production, it also contributes to saving space.



Maximum positioning point count: 4 points



Maximum positioning point count: 512 points

Rotary

# FGRC Series

## For indexing operation and workpiece inversion

#### Reduces adjustment times

## Includes manual operation and self-lock mechanisms

Equipped with a manual operation mechanism enabling tool-free operation. The rotating table position can be easily adjusted at equipment startup or when retained with the self-lock.



## Easy layout planning

#### Coaxial design

The center of rotation and the center of the actuator body are coaxial, making it easy to plan layouts.



## Smaller equipment installation footprint

#### Compact body

The FGRC Series performs acceleration/deceleration, rendering shock absorbers unnecessary.



### Application examples

## 2-finger Gripper FLSH Series



 Gently grasp various workpieces that are easy to deform, and with just one actuator.





Centering differently sized circuit board materials

## Rotary FGRC Series



 Indexing to positions for assembly and simple inspection processes

#### CKD recommends using air as well to...

- Reduce initial costs as much as possible
- Use as light an actuator as possible





Refer to the catalog No.CC-1446 for details.



#### Reduced initial work hours and stock

#### "One controller" that connects to any actuator

The same controller operates with actuators of different sizes and models. Equipped with an automatic recognition function that reads actuator information, for less work during initial setting. Further, with a common controller, work hours for selection and ordering can be reduced as well as inventory.



## Reduced controller footprint

#### Compact, allowing adjacent installation

The optimized design eliminates the need for heat dissipation space at the sides. This allows controllers to be installed next to one another.



## Connecting. Connected. "One controller" handles it all.



### Supports IoT

#### Compatible with all types of networks

Our product is compatible with all types of industrial networks. This allows control from host equipment over Ethernet, and also enables preventative maintenance.



### Reduces adjustment time

Easy setup with the "S-Tools" common software

Actuators with different operation can be set with a single common software program. Provided free of charge on the CKD website. It can be used by anyone, anywhere.



Confirm actuator status at a glance

Operation panel makes operation and checking easy