

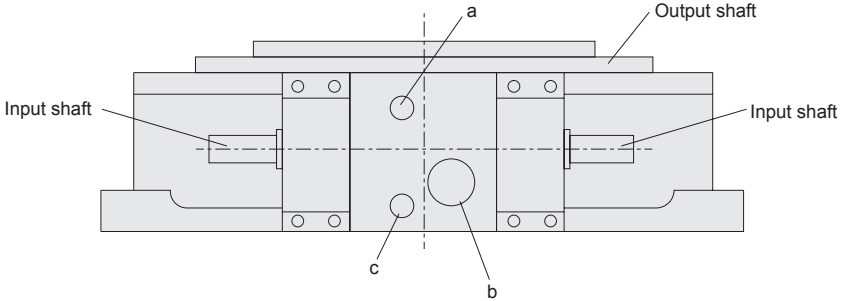
● Common specifications



1. Installation specifications

(1) The output shaft is facing upward for standard version.

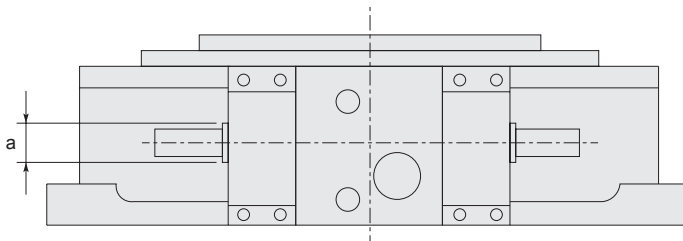
Position 1



a: Oil supply port b: Oil level gauge c: Drain port

2. Housing material/Fc

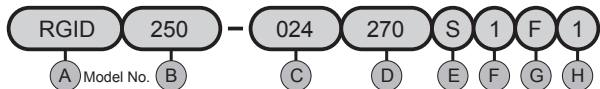
3. Diameter of the stepped section of the input shaft



| Dimensions | a |
|------------|------|
| Size | |
| 200 | ø 25 |
| 250 | ø 28 |



1. Standard units/Model No. table Index series



| B Shaft interval | | C Index number (n) | | D Total index angle (θ t) | | E Cam curve | | F Cam helix direction/dwell No. | | G Shape of the output shaft | | H Installation position | |
|------------------|--------|--------------------|----|-----------------------------------|------|-------------|----------|---------------------------------|---------------------|-----------------------------|--------|-------------------------|------------|
| 200 | 200 mm | 008 | 8 | 090 | 90° | S | MS curve | 1 | Left helix/1 dwell | F | Flange | 1 | Position 1 |
| 250 | 250 mm | 010 | 10 | 120 | 120° | C | MC curve | 2 | Left helix/2 dwell | | | | |
| | | 012 | 12 | 150 | 150° | T | MT curve | 5 | Right helix/1 dwell | | | | |
| | | 015 | 15 | 180 | 180° | | | 6 | Right helix/2 dwell | | | | |
| | | 016 | 16 | 210 | 210° | | | | | | | | |
| | | 018 | 18 | 240 | 240° | | | | | | | | |
| | | 020 | 20 | 270 | 270° | | | | | | | | |
| | | 024 | 24 | 300 | 300° | | | | | | | | |
| | | 030 | 30 | 330 | 330° | | | | | | | | |
| | | 032 | 32 | | | | | | | | | | |
| | | 036 | 36 | | | | | | | | | | |
| | | 040 | 40 | | | | | | | | | | |
| | | 048 | 48 | | | | | | | | | | |
| | | 060 | 60 | | | | | | | | | | |
| | | 064 | 64 | | | | | | | | | | |
| | | 072 | 72 | | | | | | | | | | |
| | | 080 | 80 | | | | | | | | | | |

Left helix (standard) Right helix

For details of the timing chart, refer to B-7.

Example of model No. (1)

RGID250-048240T2F1

Shaft interval..... 250 mm

Index number..... 48

Total index angle..... 240°

Cam curve MT curve

Cam helix direction and dwell number..... Left helix and 2 dwell

Shape of the output shaft Flange

Installation position..... Position 1

Product specifications

| | | |
|-----------------------|---------------------|----------|
| Roller gear cam drive | Compact multi-index | Compact |
| | Wide angle | Standard |
| | Table | Table |
| Parallel cam drive | Flat | Basic |
| | Linear / Circular | Option |

Flat

2-1. Units with Options/Model No. table

Index series



Product specifications

| | |
|---------------------|-----------------------|
| Compact | Roller gear cam drive |
| Standard | |
| Table | |
| Wide angle | Roller gear cam drive |
| Compact multi-index | |
| Flat | Roller gear cam drive |
| Basic | |
| Parallel cam drive | |
| Linear | Roller gear cam drive |
| Circular | |
| Planar drive | |
| Option | |

| Input/Output shaft specification code | | |
|---|--|---|
| ① Input shaft specification code [left shaft] | ② Input shaft specification code [right shaft] | ③ Output shaft specification code |
| N Output shaft Left shaft Stepped area N □ □ | N Right shaft □ N □ | N There is no flat output shaft option. □ □ N |
| K K □ □ | K □ K □ | |
| C C □ □ | C □ C □ | |
| N Standard (with keyway) K No keyway C Cutoff * This is cut off at the stepped spot. It will protrude from the housing. Check the dimensions with the diagram. | | |



2-2. Examples of model numbers with options/3. Custom specification model No.

When you place an order with a model number, be sure that it exactly matches what you ordered. Even if 1 letter is incorrectly written, the product will be different with different specifications. In order to deliver what you really want, carefully determine the model number referring to the following examples.

Example of model No. (2)

RGID200-048150S2F1-NKN

Input shaft specification

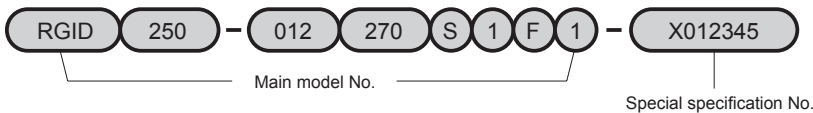
Left shaft: standard

Right shaft: no keyway

Output shaft specification

Standard

● Custom specification Model No. Common for Index and Reducer series



* Add -X [6 digit number] after the main model No. as the special specification number.

The special specification model number shall be determined after a consultation with the customer.

Options other than the standard are available upon request. Please provide CKD with the specifications.

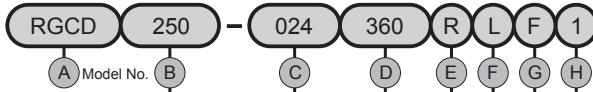
* High speed specifications (input shaft rotational speed of 200 rpm or higher) are deemed to be special specifications.

| | | | |
|-----------------------|---------------------|----------|---------|
| Roller gear cam drive | Compact multi-index | Standard | Compact |
| | Wide angle | Table | |
| | Flat | | |
| Parallel cam drive | | | Basic |
| Pico and Pico drive | Linear | Circular | |
| | Option | | |

Flat

1. Standard units/Model No. table

Reducer series



Product specifications

| Compact | | Standard | | Table | | Wide angle | | Compact multi-index | | Flat | | Basic | | Parallel cam drive | | Circular | | Linear | | Option | |
|-----------------------|--------|------------------------|------|--------------------------|------|-------------|-------------------------|---|-------------|-----------------------------|--------|-------------------------|------------|--------------------|--|----------|--|--------|--|--------|--|
| Roller gear cam drive | | | | | | | | | | | | | | | | | | | | | |
| B Shaft interval | | C Reduction ratio (id) | | D Total index angle (θt) | | E Cam curve | | F Spiral direction of the cam | | G Shape of the output shaft | | H Installation position | | | | | | | | | |
| 200 | 200 mm | 008 | 1/8 | 360 | 360° | R | Constant velocity curve | L | Left helix | F | Flange | 1 | Position 1 | | | | | | | | |
| 250 | 250 mm | 010 | 1/10 | | | | | R | Right helix | | | | | | | | | | | | |
| | | 012 | 1/12 | | | | | | | | | | | | | | | | | | |
| | | 015 | 1/15 | | | | | | | | | | | | | | | | | | |
| | | 016 | 1/16 | | | | | | | | | | | | | | | | | | |
| | | 018 | 1/18 | | | | | | | | | | | | | | | | | | |
| | | 020 | 1/20 | | | | | | | | | | | | | | | | | | |
| | | 024 | 1/24 | | | | | | | | | | | | | | | | | | |
| | | 030 | 1/30 | | | | | | | | | | | | | | | | | | |
| | | 032 | 1/32 | | | | | | | | | | | | | | | | | | |
| | | 036 | 1/36 | | | | | | | | | | | | | | | | | | |
| | | 040 | 1/40 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | <p>Left helix (standard) Right helix</p> | | | | | | | | | | | | | |
| | | | | | | | | <p>For details of the timing chart, refer to B-7.</p> | | | | | | | | | | | | | |



Example of model No. (1)

RGCD250-020360RLF1

Shaft interval.....250 mm
 Reduction ratio 1/20
 Total index angle.....360°
 Cam curve Constant velocity rotation curve
 Spiral direction of the cam Left helix
 Shape of the output shaft Flange
 Installation position Position 1

Product specifications

| | | | | | |
|--------|---|-----------------------|---------|---------------------|------------|
| Option | Piez and Piezo drive Linear Circular | Roller gear cam drive | | | |
| | | Basic | Flat | Compact multi-index | Wide angle |
| Option | Piez and Piezo drive Linear Circular | Parallel cam drive | | | |
| | | Basic | Flat | Compact multi-index | Wide angle |
| Option | Piez and Piezo drive Linear Circular | Table | | | |
| | | Standard | Compact | | |



Characteristics

| Descriptions | Unit | Characteristics | |
|--------------------------|-------------------|-----------------|-------------------------|
| | | Output shaft | Input shaft |
| Allowable thrust force | N | 9600 | 2000 |
| Allowable radial force | N | 4000 | 1200 |
| Allowable bending moment | N·m | 700 | - |
| Moment of inertia | kg·m ² | 0.494 | 4.43 × 10 ⁻³ |

| Descriptions | Unit | Characteristics |
|----------------------------------|------|-----------------|
| Internal frictional torque (Tin) | N·m | 15 |
| Product weight | kg | 70 |
| Oil level | ℓ | 1.1 |
| Paint color | | Silver |

Accuracy

| Accuracy (sec.) | | |
|-----------------|---------|------|
| Dwell accuracy | 1 dwell | ± 30 |
| | 2 dwell | ± 60 |
| Repeatability | | 15 |

* For the dwell accuracy, please contact CKD.

List of index angles

Index series **RGID 200** Cam curve/MS

| Total index angle (θt) | | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 |
|------------------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| Index number (n) | | | | | | | | | | |
| 1 dwell | 8 | | | | | | | | ○ | ○ |
| | 10 | | | | | | ○ | ○ | ○ | ○ |
| | 12 | | | | | ○ | ○ | ○ | ○ | ○ |
| | 15 | | | | ○ | ○ | ○ | ○ | ○ | ○ |
| | 16 | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 18 | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 20 | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 24 | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 30 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 32 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 2 dwell | 36 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 40 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 48 | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 60 | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 64 | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 72 | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 80 | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

Reducer series **RGCD 200**

| Total index angle (θt) | 360 |
|------------------------|-----|
| Reduction ratio (id) | |
| 1/8 | ○ |
| 1/10 | ○ |
| 1/12 | ○ |
| 1/15 | ○ |
| 1/16 | ○ |
| 1/18 | ○ |
| 1/20 | ○ |
| 1/24 | ○ |
| 1/30 | ○ |
| 1/32 | ○ |
| 1/36 | ○ |
| 1/40 | ○ |

Product specifications

Compact
Standard
Table
Roller gear cam drive
Wide angle
Compact multi-index
Flat
Basic
Parallel cam drive
Option
Pics and Pices drive
Linear Circular



Characteristics

| Descriptions | Unit | Characteristics | |
|--------------------------|-------------------|-----------------|-------------------------|
| | | Output shaft | Input shaft |
| Allowable thrust force | N | 23000 | 3200 |
| Allowable radial force | N | 9000 | 1700 |
| Allowable bending moment | N·m | 2500 | - |
| Moment of inertia | kg·m ² | 1.31 | 1.25 × 10 ⁻² |

| Descriptions | Unit | Characteristics |
|----------------------------------|------|-----------------|
| Internal frictional torque (Tin) | N·m | 25 |
| Product weight | kg | 130 |
| Oil level | ℓ | 2.2 |
| Paint color | | Silver |

Accuracy

| Accuracy (sec.) | | |
|-----------------|---------|------|
| Dwell time | 1 dwell | ± 30 |
| | 2 dwell | ± 60 |
| Repeatability | | 15 |

* For the dwell accuracy, please contact CKD.

List of index angles

Index series **RGID 250** Cam curve/MS

| Total index angle (θt) | | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 |
|------------------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| Index number (n) | | | | | | | | | | |
| 1 dwell | 8 | | | | | | | | ○ | ○ |
| | 10 | | | | | | ○ | ○ | ○ | ○ |
| | 12 | | | | | ○ | ○ | ○ | ○ | ○ |
| | 15 | | | | ○ | ○ | ○ | ○ | ○ | ○ |
| | 16 | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 18 | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 20 | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 24 | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 30 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 32 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| 2 dwell | 36 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 40 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 48 | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 60 | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 64 | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 72 | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| | 80 | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

Reducer series **RGCD 250**

| Total index angle (θt) | 360 |
|------------------------|-----|
| Reduction ratio (id) | |
| 1/8 | ○ |
| 1/10 | ○ |
| 1/12 | ○ |
| 1/15 | ○ |
| 1/16 | ○ |
| 1/18 | ○ |
| 1/20 | ○ |
| 1/24 | ○ |
| 1/30 | ○ |
| 1/32 | ○ |
| 1/36 | ○ |
| 1/40 | ○ |

Product specifications

Compact
Standard
Table
Roller gear cam drive
Wide angle
Compact multi-index
Flat
Basic
Parallel cam drive
Pics and Pices drive
Linear
Circular
Option