

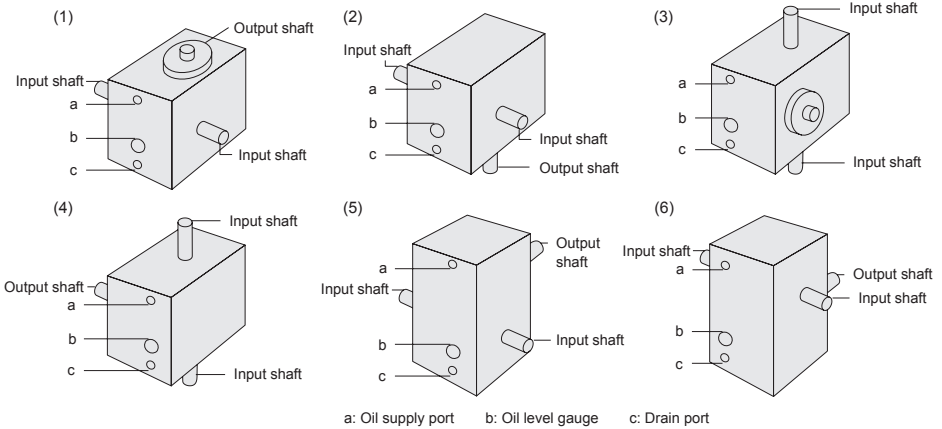
● Common specifications



## 1. Installation specifications

For the positions of the oil fill/drain ports and the oil level gauge, refer to the dimensions page for each size.

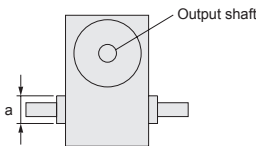
Depending on position of index drive, oil supply port, drain port and oil level gauge are differently located. You need to choose 1 of the correct positions from (1) to (6).



## 2. Housing mounting holes: mounting holes all machined on the 6 faces of the housing

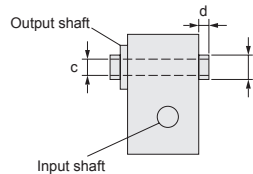
## 3. Housing material/Fc

## 4. Dimension of the stepped section of the input shaft



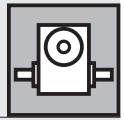
Dimensions	a
Size	
<b>063</b>	∅ 15
<b>080</b>	∅ 17
<b>100</b>	∅ 24

## 5. Hollow flange shaft model (custom order)



Dimensions	b	c	d
Size			
<b>063</b>	∅ 30	∅ 20	5
<b>080</b>	∅ 40	∅ 30	5
<b>100</b>	∅ 50	∅ 40	5

Product specifications  
 Compact  
 Standard  
 Table  
 Roller gear cam drive  
 Wide angle  
 Compact multi-index  
 Flat  
 Basic  
 Parallel cam drive  
 Linear, Circular, Rack and Pinion drive  
 Option



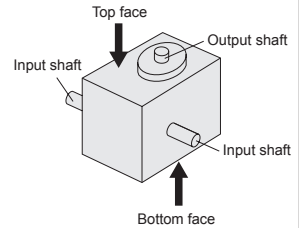
## 6. Output shaft (flange shaft) positioning pin hole dimensions (custom order)

When positioning pin holes are added to the output shaft, the dimensions below should be standard:

Size	063	080	100
Pitch			
Standard Hole diameter	2- $\emptyset$ 8H7 depth 15 (P.C.D.45)	2- $\emptyset$ 10H7 depth 20 (P.C.D.60)	2- $\emptyset$ 10H7 depth 20 (P.C.D.70)

## 7. Housing dowel pin hole dimensions (custom order)

When housing dowel pin holes are to be added, the dimensions below should be standard:



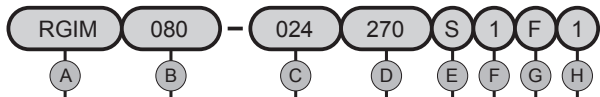
Size	063	080	100
Top face			
Bottom face			
Standard Hole diameter	2- $\emptyset$ 6H7 depth 8	2- $\emptyset$ 8H7 depth 10	2- $\emptyset$ 10H7 depth 10

\* For the tolerance of positioning pins on the lower face, contact CKD.

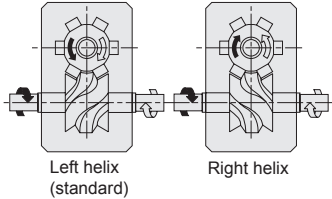
# Compact multi-index

## 1. Standard units/Model No. table Index series

Product specifications



(A) Model No.		(B) Shaft interval		(C) Index number (n)		(D) Total index angle (θt)		(E) Cam curve		(F) Cam helix direction/dwell No.	
RGIM	063	63 mm		004	4	090	90°	S	MS curve	1	Left helix/1 dwell
	080	80 mm		006	6	120	120°	C	MC curve	2	Left helix/2 dwell
	100	100 mm		008	8	150	150°	T	MT curve	3	Left helix/3 dwell
				010	10	180	180°			4	Left helix/4 dwell
				012	12	210	210°				
				016	16	240	240°			5	Right helix/1 dwell
				020	20	270	270°			6	Right helix/2 dwell
				024	24	300	300°			7	Right helix/3 dwell
				032	32	330	330°			8	Right helix/4 dwell
				040	40						
				048	48						
				060	60						
				064	64						
				072	72						
				080	80						
				096	96						

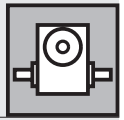


For details of the timing chart, refer to B-7.

### Example of model No. (1)

#### RGIM080-010180C1F2

- Shaft interval..... 80 mm
- Index number..... 10
- Total index angle..... 180°
- Cam curve ..... MC curve
- Cam helix direction/dwell No. .... Left helix/1 dwell
- Shape of the output shaft ..... Flange
- Installation position..... Position 2



G Shape of the output shaft		H Installation position	
F	Flange	1 Position 1 2 Position 2 3 Position 3 4 Position 4 5 Position 5 6 Position 6	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <p><b>Position 1</b></p> </div> <div style="width: 50%;"> <p><b>Position 2</b></p> </div> <div style="width: 50%;"> <p><b>Position 3</b></p> </div> <div style="width: 50%;"> <p><b>Position 4</b></p> </div> <div style="width: 50%;"> <p><b>Position 5</b></p> </div> <div style="width: 50%;"> <p><b>Position 6</b></p> </div> </div>

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

Parallel cam drive	Compact multi-index	Wide angle	Table	Standard	Compact
	Flat	Basic			
	Option				

Pics and Pieces drive	Linear	Circular
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# Compact multi-index

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

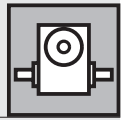
Index series



Product specifications

Compact  
 Standard  
 Table  
 Wide angle  
 Compact multi-index  
 Flat  
 Basic  
 Parallel cam drive  
 Circular  
 Linear  
 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	N	N There is no output shaft option for compact multi-index. □ □ N
K	K	
C	C	
J	J	
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. J Input shaft - with rotation detection cam + proximity switch (1 station) *2 or more are custom order items. (When the input shaft is rotated in both directions, 2 may be required.) *3 or more dwell intervals are custom order items. *The proximity switch detects 2 spots for 2 dwell.		



## 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)

#### **RGIM100-048120S2F1-NJN**

Input shaft specification

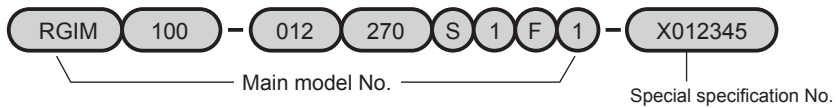
Left shaft: standard

Right shaft: Input shaft - with rotation detection cam + proximity switch (1 station)

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 by request. Please provide CKD with the specifications.

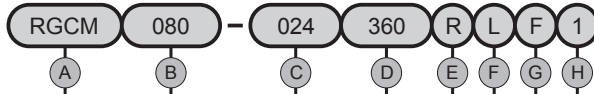
\*High speed specifications (input shaft rotational speed of 200 rpm or higher) are special specifications.

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

# Compact multi-index

## 1. Standard units / Model No. table Reducer series

Product specifications



A model No.		B Shaft interval		C reduction ratio (rd)		D Total index angle (θt)		E Cam curve		F Cam helix direction/dwell No.	
RGCM	063	63 mm		004	1/4	360	360°	R	Constant velocity rotation curve	L	Left helix
	080	80 mm		006	1/6					R	Right helix
	100	100 mm		008	1/8						
			010	1/10							
			012	1/12							
			016	1/16							
			020	1/20							
			024	1/24							

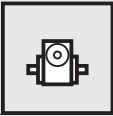
Left helix (standard)      Right helix

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

### Example of model No. (1)

**RGCM063-012360RLF5**

- Shaft interval..... 63 mm
- Reduction ratio ..... 1/12
- Total index angle..... 360°
- Cam curve ..... Constant velocity rotation curve
- Cam helix direction/dwell No. .... Left helix
- Shape of the output shaft ..... Flange
- Installation position..... Position 5



Product specifications

G Shape of the output shaft		H Installation position	
F	Flange	1 Position 1 2 Position 2 3 Position 3 4 Position 4 5 Position 5 6 Position 6	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <p><b>Position 1</b></p> </div> <div style="width: 50%;"> <p><b>Position 2</b></p> </div> <div style="width: 50%;"> <p><b>Position 3</b></p> </div> <div style="width: 50%;"> <p><b>Position 4</b></p> </div> <div style="width: 50%;"> <p><b>Position 5</b></p> </div> <div style="width: 50%;"> <p><b>Position 6</b></p> </div> </div>

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

Compact	Standard	Table	Roller gear cam drive	Wide angle	Compact multi-index	Flat	Basic	Parallel cam drive	Plan and Rack drive	Linear	Circular	Option
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Difference between shafts: **63** mm Flange shaft

# Compact multi-index

Index

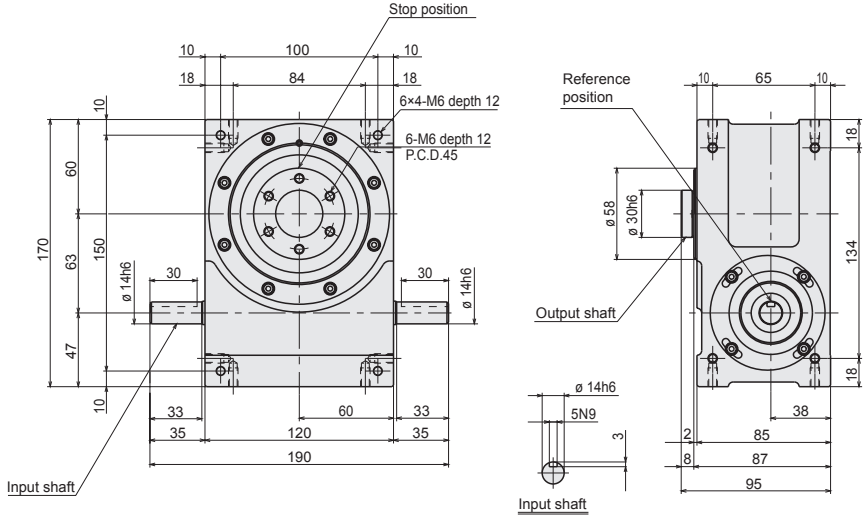
**RG I M 063**

Reducer

**RGCM 063**

● Standard specifications

## Dimensions



RG I M 063- [ ] [ ] [ ] [ ] [ ] F [ ]  
RGCM 063

## Installation position and oil supply/drain port and oil level gauge positions

- Oil fill/drain port (Rc<sup>1</sup>/<sub>4</sub>)
- Oil level gauge (ø 20)

Installation position	1	2	3
Series	<b>RGIM/RGCM</b>	<b>RGIM/RGCM</b>	<b>RGIM/RGCM</b>
Dimensions			
Installation position	4	5	6
Series	<b>RGIM/RGCM</b>	<b>RGIM/RGCM</b>	<b>RGIM/RGCM</b>
Dimensions			

Product specifications

Compact

Standard

Table

Wide angle

Roller gear cam drive

Compact multi-index

Flat

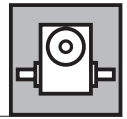
Basic

Parallel cam drive

Linear

Circular

Option



## Characteristics

Descriptions	Unit	Characteristics	
		Output shaft	Input shaft
Allowable thrust force	N	5000	800
Allowable radial force	N	4500	750
Allowable bending moment	N·m	200	-
Moment of inertia	kg·m <sup>2</sup>	$1.28 \times 10^{-3}$	$2.48 \times 10^{-4}$

Descriptions	Unit	Characteristics
Internal frictional torque (T <sub>in</sub> )	N·m	1.9
Product weight	kg	9.0
Oil level	ℓ	0.3
Paint color		Silver

## Accuracy

Accuracy (sec.)		
Indexing accuracy	1 dwell	±30
	2 dwell	±90
	3 dwell	±135
	4 dwell	±180
Repeatability		20

\* For the dwell accuracy, please contact CKD.

## List of index angles

Index series **RGIM 063** Cam curve/MS

Total index angle (θt)		90	120	150	180	210	240	270	300	330
Index number (n)										
1 dwell	4							○	○	○
	6				○	○	○	○	○	○
	8				○	○	○	○	○	○
	10				○	○	○	○	○	○
	12	○	○	○	○	○	○	○	○	○
	16	○	○	○	○	○	○	○	○	○
	20	○	○	○	○	○	○	○	○	○
24			○	○	○	○	○	○	○	
2 dwell	32		○	○	○	○	○	○	○	○
	40	○	○	○	○	○	○	○	○	○
	48			○	○	○	○	○	○	○
3 dwell	48			○	○	○	○	○	○	○
	60		○	○	○	○	○	○	○	○
	72				○	○	○	○	○	○
4 dwell	64			○	○	○	○	○	○	○
	80		○	○	○	○	○	○	○	○
	96			○	○	○	○	○	○	○

Reducer series **RGCM 063**

Total index angle (θt)		360
Reduction ratio (jd)		
1/4	○	
1/6	○	
1/8	○	
1/10	○	
1/12	○	
1/16	○	
1/20	○	
1/24	○	

Product specifications

Compact

Standard

Table

Roller gear cam drive

Wide angle

Compact multi-index

Flat

Basic

Parallel cam drive

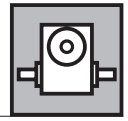
Pick and Place drive

Linear

Circular

Option





## Characteristics

Descriptions	Unit	Characteristics	
		Output shaft	Input shaft
Allowable thrust force	N	7000	1200
Allowable radial force	N	7000	900
Allowable bending moment	N·m	500	-
Moment of inertia	kg·m <sup>2</sup>	$6.76 \times 10^{-3}$	$7.35 \times 10^{-4}$

Descriptions	Unit	Characteristics
Internal frictional torque (Tin)	N·m	3.0
Product weight	kg	25
Oil level	ℓ	0.7
Paint color		Silver

## Accuracy

Accuracy (sec.)		
Indexing accuracy	1 dwell	±30
	2 dwell	±60
	3 dwell	±90
	4 dwell	±120
Repeatability		15

\* For the dwell accuracy, please contact CKD.

## List of index angles

Index series **RGIM 080** Cam curve/MS

Total index angle (θt)		90	120	150	180	210	240	270	300	330
Index number (n)										
1 dwell	4								○	○
	6				○	○	○	○	○	○
	8			○	○	○	○	○	○	○
	10			○	○	○	○	○	○	○
	12	○	○	○	○	○	○	○	○	○
	16	○	○	○	○	○	○	○	○	○
	20	○	○	○	○	○	○	○	○	○
24	○	○	○	○	○	○	○	○	○	
2 dwell	32		○	○	○	○	○	○	○	○
	40	○	○	○	○	○	○	○	○	○
	48	○	○	○	○	○	○	○	○	○
3 dwell	48			○	○	○	○	○	○	○
	60		○	○	○	○	○	○	○	○
	72	○	○	○	○	○	○	○	○	○
4 dwell	64			○	○	○	○	○	○	○
	80		○	○	○	○	○	○	○	○
	96		○	○	○	○	○	○	○	○

Reducer series **RGCM 080**

Total index angle (θt)	360
Reduction ratio (id)	
1/4	○
1/6	○
1/8	○
1/10	○
1/12	○
1/16	○
1/20	○
1/24	○

Product specifications

Compact

Standard

Table

Wide angle

Compact multi-index

Flat

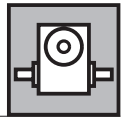
Basic

Parallel cam drive

Pick and Place drive  
Linear  
Circular

Option





## Characteristics

Descriptions	Unit	Characteristics	
		Output shaft	Input shaft
Allowable thrust force	N	9000	2200
Allowable radial force	N	9500	2000
Allowable bending moment	N·m	800	-
Moment of inertia	kg·m <sup>2</sup>	$1.80 \times 10^{-2}$	$2.01 \times 10^{-3}$

Descriptions	Unit	Characteristics
Internal frictional torque (T <sub>in</sub> )	N·m	4.8
Product weight	kg	40
Oil level	ℓ	1.2
Paint color		Silver

## Accuracy

Accuracy (sec.)		
Indexing accuracy	1 dwell	±30
	2 dwell	±50
	3 dwell	±70
	4 dwell	±90
Repeatability		15

\* For the dwell accuracy, please contact CKD.

## List of index angles

Index series **RGIM 100** Cam curve/MS

Total index angle (θt)		90	120	150	180	210	240	270	300	330
1 dwell	4									
	6				○	○	○	○	○	○
	8			○	○	○	○	○	○	○
	10			○	○	○	○	○	○	○
	12	○	○	○	○	○	○	○	○	○
	16	○	○	○	○	○	○	○	○	○
	20	○	○	○	○	○	○	○	○	○
	24	○	○	○	○	○	○	○	○	○
2 dwell	32		○	○	○	○	○	○	○	○
	40	○	○	○	○	○	○	○	○	○
	48	○	○	○	○	○	○	○	○	○
3 dwell	48			○	○	○	○	○	○	○
	60		○	○	○	○	○	○	○	○
	72	○	○	○	○	○	○	○	○	○
4 dwell	64			○	○	○	○	○	○	○
	80		○	○	○	○	○	○	○	○
	96		○	○	○	○	○	○	○	○

Reducer series **RGCM 100**

Total index angle (θt)	360
Reduction ratio (id)	
1/4	○
1/6	○
1/8	○
1/10	○
1/12	○
1/16	○
1/20	○
1/24	○

Product specifications

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