*The "ZERO-Backlash" Reducer*

# *RollerDrive*

## RE series


SANKYO SEISAKUSHO CO.

The "ZERO-Backlash" reducer

# RollerDrive

## RE series

# This standard model continues the tradition of zero-backlash technology

## The *RollerDrive RE* Series provides high-quality movement, precise to input control commands, using zero-backlash technology.

In FA equipment, motion control using servo systems is a crucial element which greatly affects equipment performance. Naturally, equipment specifications and performance are designed assuming that the expected motion is attained, but if there are factors such as backlash, insufficient rigidity or control instability in the motion control section, then output motion will deviate from input control commands, and it will be difficult to attain the expected performance.

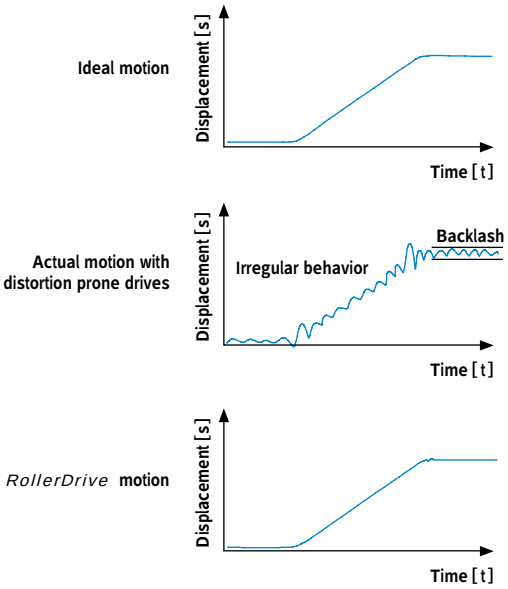
With the ***RollerDrive RE*** Series, a servomotor is mechanically reduced while maintaining powerful torque, rigidity and stability, and output motion faithful to input control commands can be attained by achieving zero-backlash with our unique preload mechanism. This is a revolutionary FA motion control unit, which combines rolling transmission for high-efficiency and elimination of wear, an orthogonal layout of input and output axes for greater compactness, and standard features like a large diameter hollow shaft for greater ease-of-use.

## In pursuit of true high-quality motion

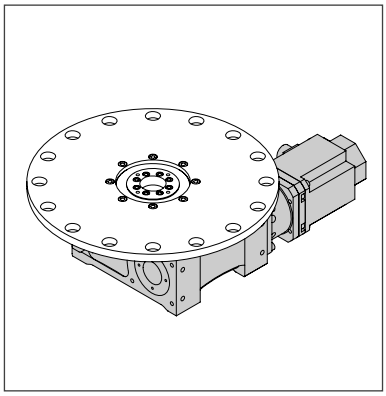
With previous motion equipment, the quality of motion was evaluated primarily based on accuracy and rigidity in the stationary state. Naturally, these stationary characteristics are important, but in reality, accuracy and stability during movement have a large impact on the performance of FA equipment.

In motion equipment with backlash or inferior response, motion does not proceed in accordance with control commands due to deterioration of dynamic accuracy and irregular behavior, and thus it is difficult to attain the necessary performance.

***RollerDrive*** improves the performance of all FA equipment by employing zero-backlash technology to create output operation faithful to input control commands.

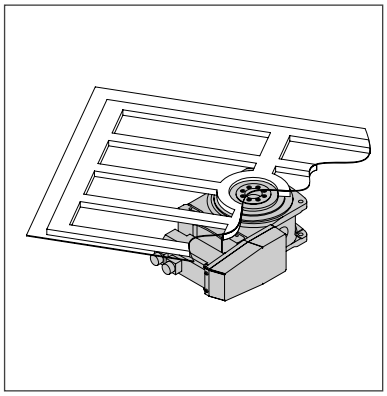



## A wide variety of applications



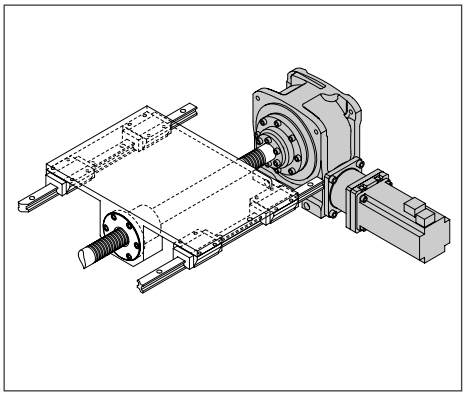
### High-speed precision positioning

Settling time is short, and this enables precise positioning. Speed fluctuation during movement is extremely small, and high-accuracy synchronization is also possible. Almost no maintenance is necessary, and this helps control life-cycle costs of FA systems.



### Rotation of large panels

A large diameter table surface, with high permissible axial load, enables mounting of large jigs. The drive section can be configured for greater thinness and compactness. Settling can be done in a short time.



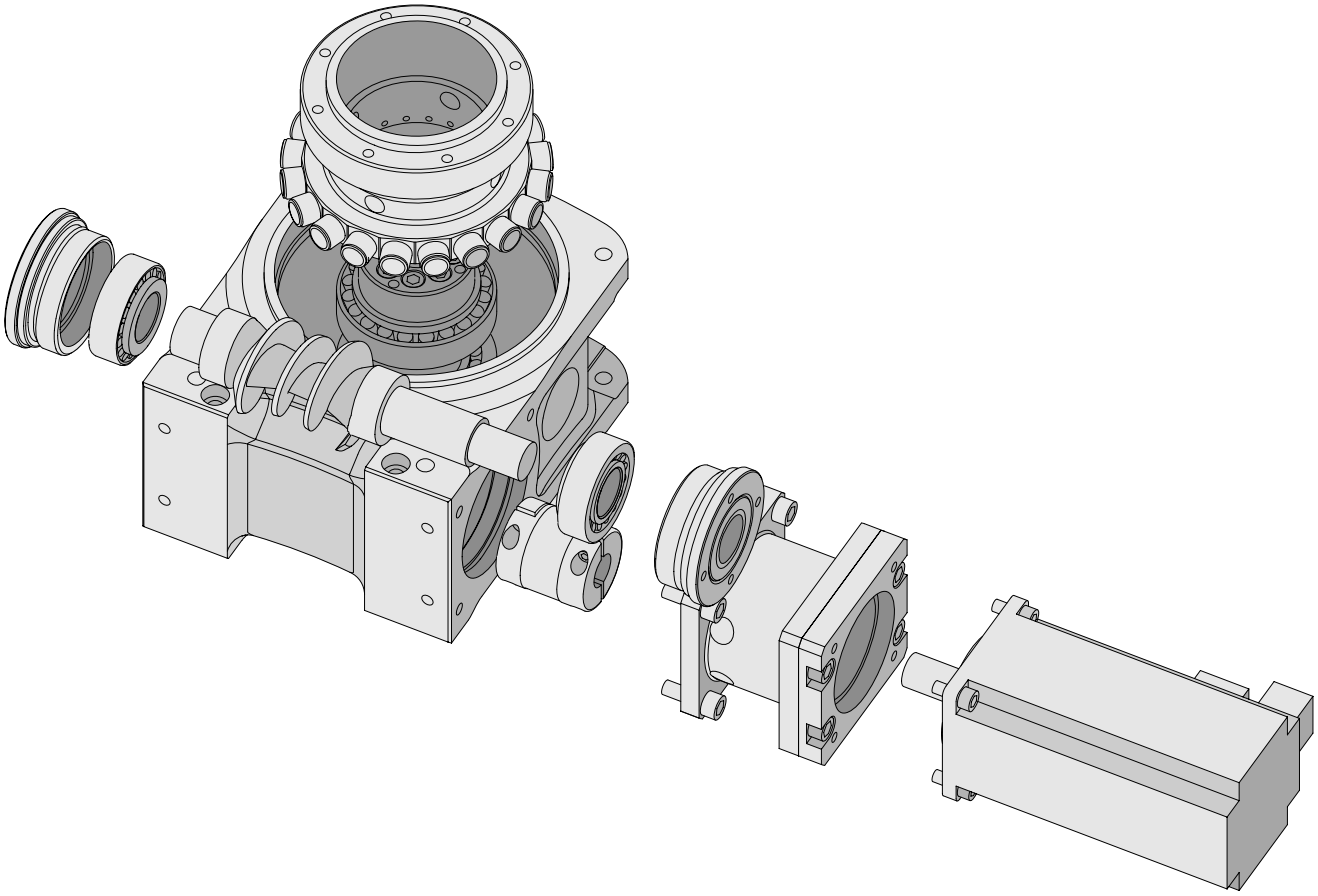
### Ball screw drive

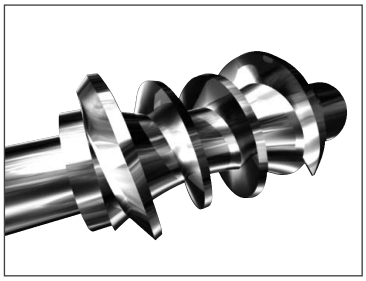
***RollerDrive*** has no backlash, thus enabling precise output operation to the commands input to the servomotor.

These units are ideal for precision drive of ball screws. The drive section can be compactly configured using an orthogonal axis layout.

# The "ZERO-Backlash" Technology

## Structure and design developed through the pursuit of ideal function and performance



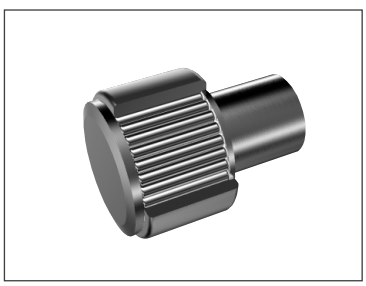


### Input shaft

In order to meet stringent accuracy requirements, the alloy steel input shaft is manufactured using state-of-the-art machining theory and equipment. Balancing is also done to control self-induced oscillation during high-speed rotation.

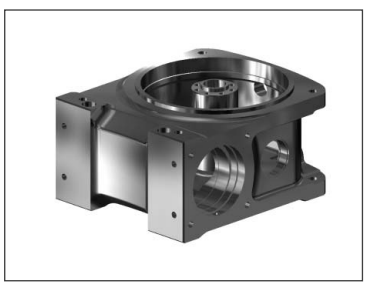
### Output shaft

The shaft is shaped with a large diameter table surface, and the roller followers which transmit rotation are provided in a radiating fashion. Rotation is transmitted by the rolling contact between multiple roller followers and the input shaft.



### Roller followers

These are roller bearing structures which transmit torque while rotating. Contact points are in rolling contact, so the initial accuracy can be maintained semi-permanently, even with long-term use.



### Housing

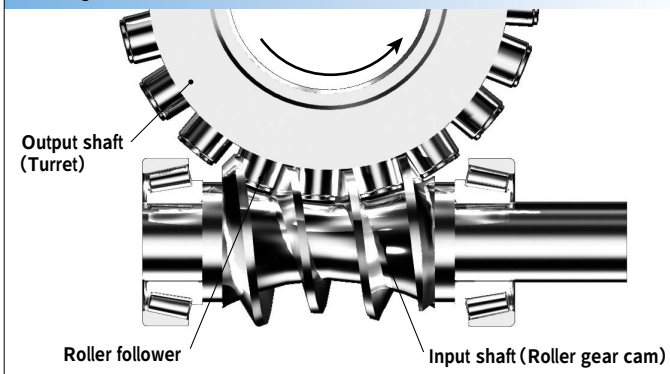
The housing is rigid cast-iron. A hollow fastening flange is provided on the inside of the output section, and a centering location is provided on the output side.

## Principle of action

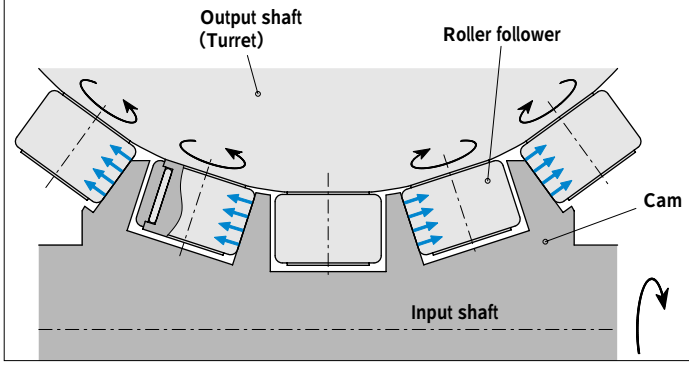
The RollerDrive reducer is optimally designed for high accuracy reducion. By using a roller gear mechanism, we offer one of the very best motion control mechanisms.

The roller gear mechanism consists of main parts such as an input shaft cam (roller gear cam), a cam follower and a turret supporting the cam follower. The cam is screw shaped, and the cam follower displaces the cam relative to the rotation of the cam, thus rotating the turret. The cross-section of the roller gear cam is wedge-shaped and this wedge completely eliminates any backslash taking up the space between the two cam followers. Each cam follower has a roller bearing inside. Since all contact areas are in rolling contact, they are not subject to abrasive wear, thus maintaining stable accuracy. Each component has mathematically derived, complex 3D shapes. But, the mechanism has a very simple arrangement, hence very high durability and reliability.

**Roller gear cam mechanism**




**Preload mechanism**




## Drive specifications

With the *RollerDrive RE* Series, there are specifications where a servomotor is mounted, in addition to a single reducer. You can select drive section specifications to suit your application.

**●Coupling specification**

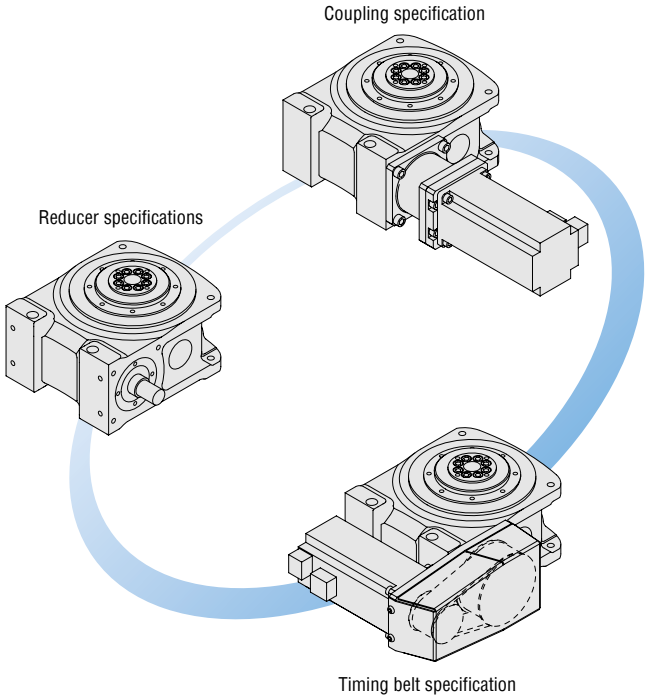
These units can handle high gain by fastening with a highly rigid coupling, and this is ideal for high-speed, precision operation.

**●Timing belt specification**

A high reduction ratio is obtained by further reducing the *RollerDrive* with a pulley. This is ideal for applications in equipment with high drive inertia.

**●Reducer specifications**

These specifications enable adaptation to a broad range of situations, such as mechanical synchronization of multiple reducers.



# RollerDrive specifications

## SPECIFICATIONS

| Model | Gear ratio | Dynamic rated output torque Top (N•m) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| RE | i | Average output rotation speed $n_{mean}$ (rpm) | | | | | | | | |
| | | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| 63 | 20 | 105.0 | 93.1 | 85.4 | 79.7 | 75.5 | 72.2 | 69.2 | 66.9 | 64.8 |
| 80 | 20 | 164.4 | 145.5 | 133.5 | 124.8 | 118.1 | 112.9 | 108.5 | 104.6 | 101.5 |
| 100 | 20 | 455.1 | 403.1 | 369.8 | 345.8 | 327.4 | 312.7 | 300.4 | 289.9 | 280.9 |
| 125 | 20 | 762.5 | 675.1 | 619.4 | 579.2 | 548.4 | 523.7 | 503.0 | 485.6 | 470.6 |
| 160 | 20 | 1533.5 | 1357.8 | 1245.6 | 1164.9 | 1103.0 | 1053.2 | 1011.7 | 976.6 | 946.1 |
| 250 | 20 | 4931.8 | 4366.9 | 4005.7 | 3746.4 | 3547.0 | 3386.7 | 3253.8 | 3140.7 | 3043.0 |

| Model | Gear ratio | Input shaft friction torque | Upper limit torque at start/stop | Permissible average input rotation speed | Permissible maximum input rotation speed | Input conversion moment of inertia | Angular transmission accuracy | Surface runout | Weight |
|---|---|---|---|---|---|---|---|---|---|
| RE | i | Tx | Tu | Nm max | Nu max | J | | | |
| | | N•m | N•m | rpm | rpm | $kg•m^2×10^{-4}$ | sec. Max. | μm Max. | kg |
| 63 | 20 | 0.8 | 129.3 | 1000 | 3000 | 0.626 | ±60 | 20 | 9 |
| 80 | 20 | 1.3 | 202.2 | 1000 | 3000 | 2.199 | ±60 | 20 | 16.5 |
| 100 | 20 | 2.6 | 560.4 | 1000 | 3000 | 6.546 | ±60 | 20 | 31 |
| 125 | 20 | 3.8 | 938.6 | 1000 | 3000 | 12.669 | ±60 | 20 | 55 |
| 160 | 20 | 6.6 | 1888.0 | 1000 | 3000 | 46.988 | ±60 | 20 | 126 |
| 250 | 20 | 14.5 | 6071.7 | 1000 | 3000 | 430.041 | ±60 | 20 | 383 |

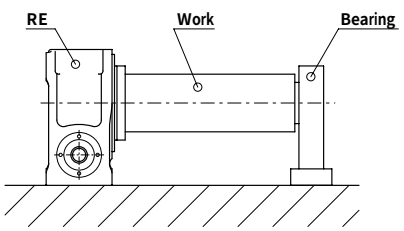
## Permissible output shaft load

The ***RollerDrive RE*** Series has a built-in Taper roller bearing for output.

Please use within a range not exceeding the permissible radial, axial and moment load in the following Table.

| Model | Gear ratio | Permissible axial load [N] | Permissible radial load [N] | Permissible moment load [N•m] |
|---|---|---|---|---|
| RE | i | Pa max | Pr max | Mmean max |
| 63 | 20 | 2400 | 1204 | 89.6 |
| 80 | 20 | 3425 | 2209 | 186.6 |
| 100 | 20 | 5796 | 3196 | 319.6 |
| 125 | 20 | 10080 | 4939 | 617.4 |
| 160 | 20 | 17170 | 7283 | 1216.3 |
| 250 | 20 | 38051 | 11165 | 2478.6 |

Note) If the radial load or moment load is higher than 50% of the listed value, then use a bearing or other structure to support both ends.



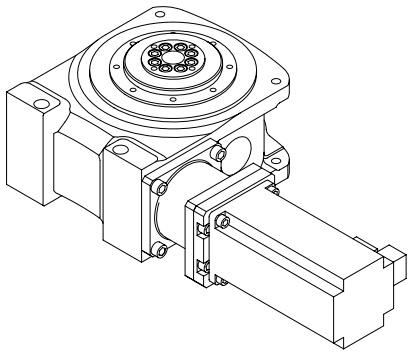

# Drive specifications

## Specifications

A servomotor can be mounted to the ***RollerDrive RE*** Series.

There are two methods of servomotor mounting. Coupling specifications for high-gain are suitable for high-speed precision operation. Timing belt specifications are suitable when drive inertia is large.

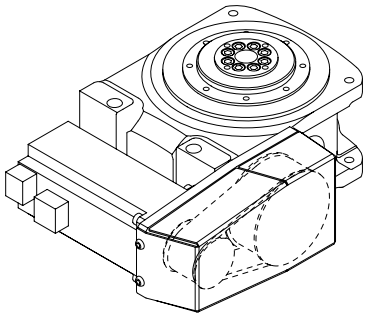
**Coupling specification**



| Model | Total reduction ratio | Motor shaft conversion moment of inertia | Loadable inertia | Weight |
|---|---|---|---|---|
| RE | i | Jm | J | |
| | | $kg \cdot m^2 \times 10^{-4}$ | $kg \cdot m^2$ | kg |
| 63 | 20 | 0.756 | 0.2305 | 1.2 |
| 80 | 20 | 2.469 | 1.3492 | 3.5 |
| 100 | 20 | 6.966 | 2.5013 | 4.8 |
| 125 | 20 | 14.069 | 3.5372 | 6 |
| 160 | 20 | 70.588 | 6.3765 | 15 |
| 250 | 20 | 534.041 | 3.6383 | 39 |

● Values in the Table are for when the following servomotor is mounted.
● Weight is the value for the drive section, without the servomotor.

**Timing belt specification**



| Model | Total reduction ratio | Drive section reduction ratio | Motor shaft conversion moment of inertia | Loadable inertia | Weight |
|---|---|---|---|---|---|
| RE | i | $i_m$ | Jm | J | |
| | | | $kg \cdot m^2 \times 10^{-4}$ | $kg \cdot m^2$ | kg |
| 63 | 40 | 2 | 1.705 | 0.7705 | 1.8 |
| 80 | 40 | 2 | 3.052 | 1.4317 | 2.5 |
| 100 | 40 | 2 | 8.763 | 9.7180 | 4.5 |
| 125 | 40 | 2 | 19.530 | 13.2752 | 8 |
| 160 | 40 | 2 | 60.121 | 44.3806 | 16.5 |
| 250 | 40 | 2 | 239.490 | 61.6816 | 29.5 |

● Values in the Table are for when the following servomotor is mounted.
● Weight is the value for the drive section, without the servomotor.

## Motors handled by our company

| Model | Drive specifications | Motor model | Servo pack | Rated output | Rated torque | Maximum torque | Rated rotation speed | Rotor J | Weight |
|---|---|---|---|---|---|---|---|---|---|
| RE | — | Σ-Ⅲ series | SGDS | kW | N•m | N•m | rpm | $kg \cdot m^2 \times 10^{-4}$ | kg |
| 63 | Coupling specification | SGMAS-06A2A21 | SGDS-08A01A | 0.6 | 1.91 | 5.73 | 3000 | 0.326 | 1.7 |
| | Timing belt specification | SGMAS-06A2A41 | SGDS-08A01A | | | | | | |
| 80 | Coupling specification | SGMGH-03A2B21 | SGDS-05A01A | 0.3 | 2.84 | 7.17 | 1000 | 7.24 | 5.5 |
| | Timing belt specification | SGMAS-12A2A41 | SGDS-15A01A | 1.15 | 3.66 | 11.0 | 3000 | 1.20 | 3.6 |
| 100 | Coupling specification | SGMGH-06A2B21 | SGDS-10A01A | 0.6 | 5.68 | 14.1 | 1000 | 13.9 | 7.6 |
| | Timing belt specification | SGMGH-09A2A21 | SGDS-10A01A | 0.85 | 5.39 | 13.8 | 1500 | 13.9 | 7.6 |
| 125 | Coupling specification | SGMGH-09A2B21 | SGDS-10A01A | 0.9 | 8.62 | 19.3 | 1000 | 20.5 | 9.6 |
| | Timing belt specification | SGMGH-13A2A21 | SGDS-15A01A | 1.3 | 8.34 | 23.3 | 1500 | 20.5 | 9.6 |
| 160 | Coupling specification | SGMGH-20A2B21 | SGDS-20A01A | 2.0 | 19.1 | 44.0 | 1000 | 46.0 | 18 |
| | Timing belt specification | SGMGH-44A2A21 | SGDS-50A01A | 4.4 | 28.4 | 71.1 | 1500 | 67.5 | 23 |
| 250 | Coupling specification | SGMGH-55A2B21 | SGDS-60A01A | 5.5 | 52.6 | 136.9 | 1000 | 125 | 40 |
| | Timing belt specification | SGMGH-75A2A21 | SGDS-75A01A | 7.5 | 48.0 | 119 | 1500 | 125 | 40 |

● Motor power cable (3m) and encoder cable (3m) are included.
● The combination of timing belt specifications with a servomotor having medium inertia specifications and a large rotor J is suitable for handling higher drive inertia.

# MODEL CODE

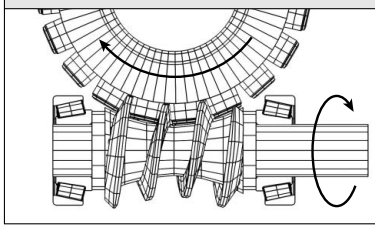
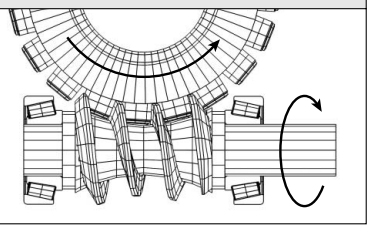
## MODEL CODE

| 1 | 2 | | 3 | 4 | 5 | | 6 | 7 | 8 | | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| RE | 63 | - | 20 | L | 1 | - | 1 | M | T | - | X |

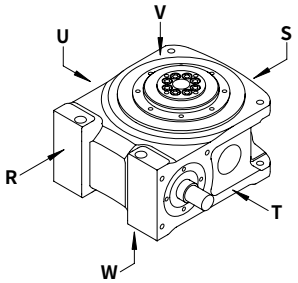
| Basic specifications | | | | | | | | 9 |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| Model | Size (Distance between shafts) | Gear ratio | Input shaft torsion | Use orientation | Drive specifications | Servomotor mounting | Input position | Special Instruction |
| RE | 63 | 20 | L | 1•2•3•4•5•6•0 | S | Not filled in | T•U | X |
| | 80 | | | | | | | |
| | 100 | | | | | | | |
| | 125 | | | | 1•2 | M•X•C | | |
| | 160 | | | | | | | |
| | 250 | | | | | | | |

- Please write in codes 7 if you want the servo motor provided.
- Please write in code 9 if there are special specifications. Please notify us of the content of the special specifications.

### 4 Input shaft torsion (V-surface side)

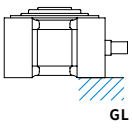
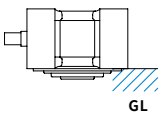
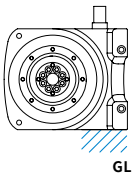
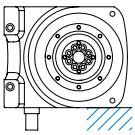
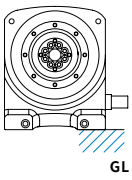
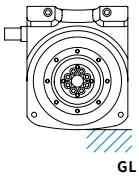
| ※L | R |
|---|---|
|  |  |

※Indicate L if there are no special instructions.

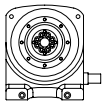
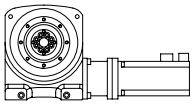
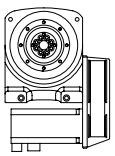



※The surfaces of the RollerDrive main body are indicated as follows by letters of the alphabet.

### 5 Use orientation code

| 1 | 2 | 3 | 4 | 5 | 6 | 0 |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  | Changing orientation |
| W surface on bottom | V surface on bottom | U surface on bottom | T surface on bottom | R surface on bottom | S surface on bottom | |

### 6 Drive specification code

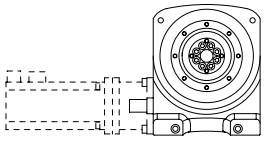
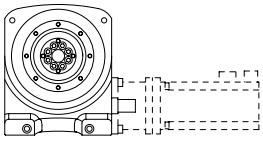
| S | 1 | 2 |
|---|---|---|
|  |  |  |
| Reducer only | Coupling specification | Timing belt specification |

### 7 Servomotor mounting code

| Not filled in | M |
|---|---|
| Reducer only | Standard (listed on P. 6) |

| X | C |
|---|---|
| Other designated motor | Customer supplied motor |

### 8 Input position code

| U | T |
|---|---|
|  |  |
| Input to U surface side | Input to T surface side |

### 9 Special specifications (Please discuss with our company)

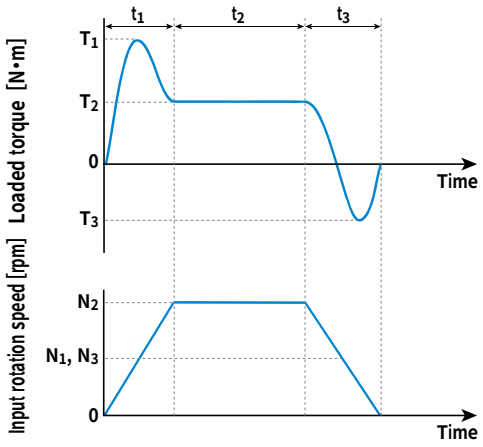
Examples:
- If a non-standard gear ratio is necessary
- If you want to mount another company's servo or a stepping motor instead of a standard servomotor

# Selection, Capacity check

## Selection method

### Loaded torque graph

Check torque and rotation speed at start-up, during steady operation, and at stopping.
The average value in the operation interval is used for the rotation speed N.




### Find conditions

| | |
|---|---|
| Find the average loaded torque from the loaded torque graph. | $T_{mean}=\sqrt[\frac{10}{3}]{\frac{n_1\cdot t_1\cdot\lvert T_1\rvert^{\frac{10}{3}}+n_2\cdot t_2\cdot\lvert T_2\rvert^{\frac{10}{3}}+\cdots+n_n\cdot t_n\cdot\lvert T_n\rvert^{\frac{10}{3}}}{n_1\cdot t_1+n_2\cdot t_2+\cdots+n_n\cdot t_n}}\ (N\cdot m)$ |
| Average output rotation speed | $n_{mean}=\frac{n_1\cdot t_1+n_2\cdot t_2+\cdots+n_n\cdot t_n}{t_1+t_2+\cdots+t_n}\ (rpm)$ |
| Average input rotation speed | $N_{mean}=n_{mean}\times i$ (Gear ratio) (rpm) |
| Maximum input rotation speed | $N_{max}=n_{max}$ (Maximum output rotation speed) $\times i$ (Gear ratio) (rpm) |

### Tentative selection of size

Tentatively select a size satisfying the 3 alternative conditions at right by referring to the rating Tables.

$T_{mean}$ < Dynamic rated output torque $T_{op}$ $(N\cdot m)$

$N_{mean}$ < Permissible average input rotation speed $N_{m\,max}$ (rpm)

$N_{max}$ < Permissible maximum input rotation speed $N_{u\,max}$ (rpm)

### Check capacity

Check start/stop torque

$T_1$ < Upper limit torque when starting/stopping $T_u$ $(N\cdot m)$

$T_3$ < Upper limit torque when starting/stopping $T_u$ $(N\cdot m)$

Coefficient due to operating conditions

| Conditions | f |
|---|---|
| Smooth operation with no shock load | 1.0~1.2 |
| Normal operation | 1.2~1.5 |
| Operation with shock load | 1.5~3.0 |

Expected service life

$$L_h=12000\cdot\left(\frac{T_{op}}{f\cdot T_{mean}}\right)^{\frac{10}{3}}\ (hours)$$

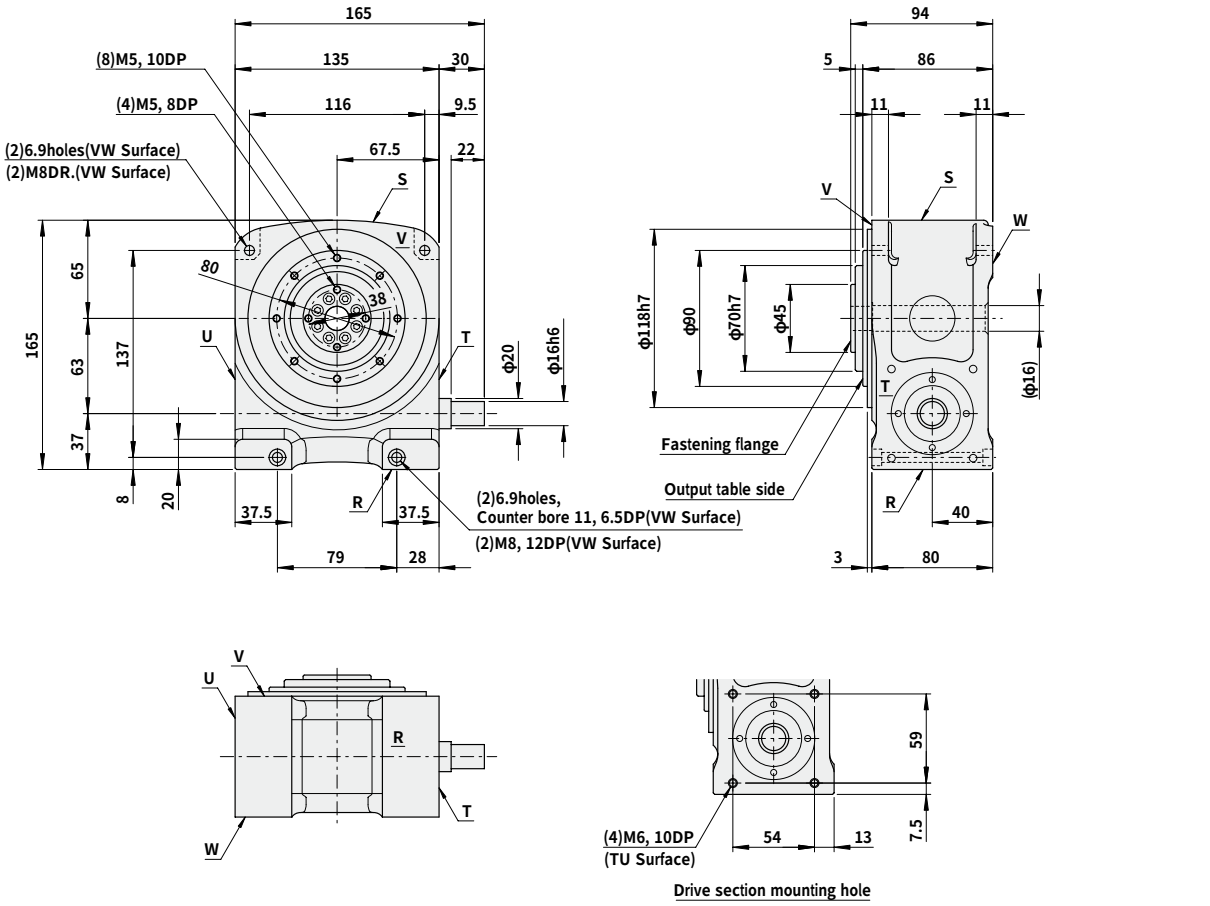
If conditions are not satisfied

Selection is completed when the required specifications are met

# Dimensions

[Unit:mm]

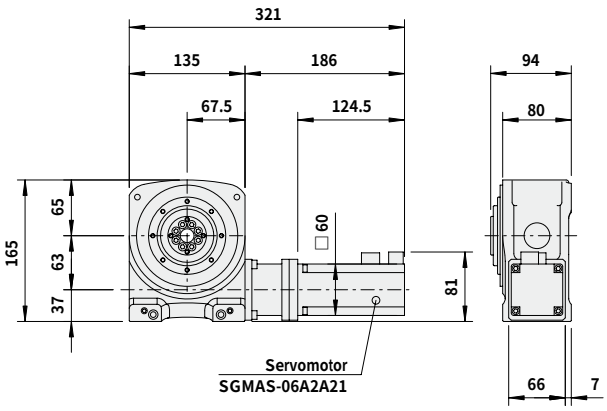
## RE63



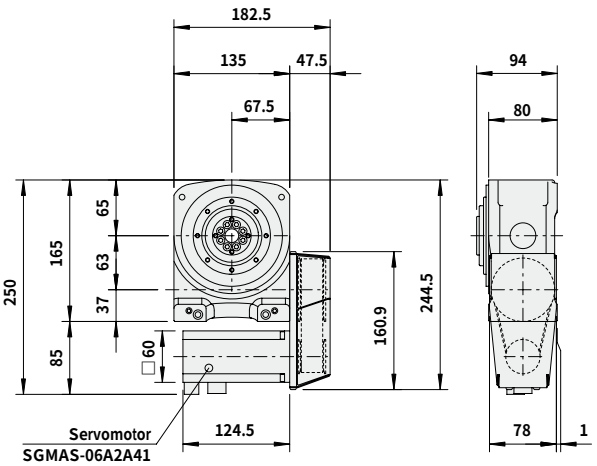

Uses grease lubrication.

## Example of servomotor mounting

### RE63 Coupling specifications

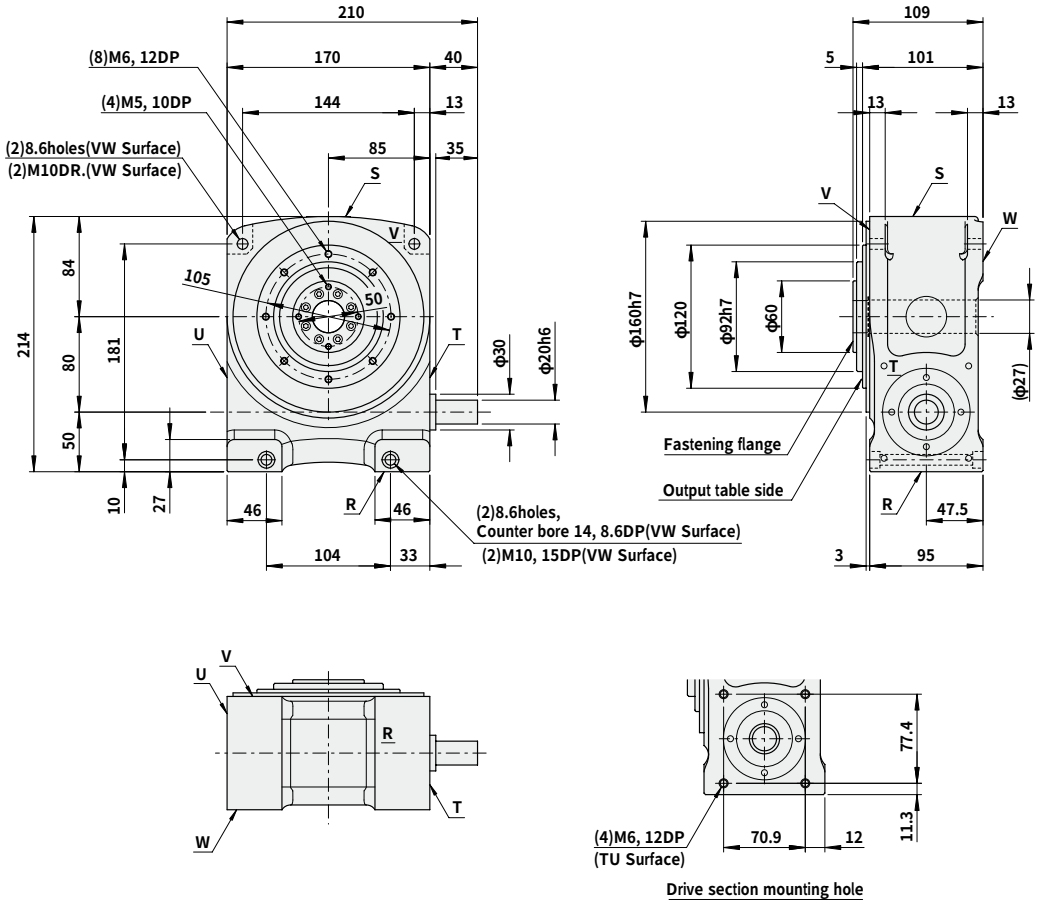



### RE63 Timing belt specifications



[Unit:mm]

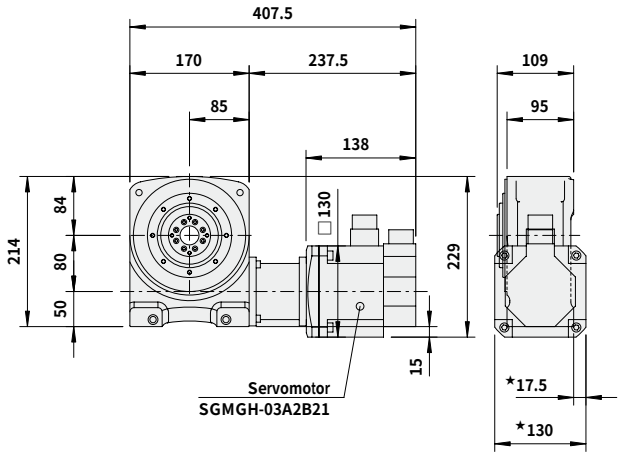
## RE80




Uses grease lubrication.

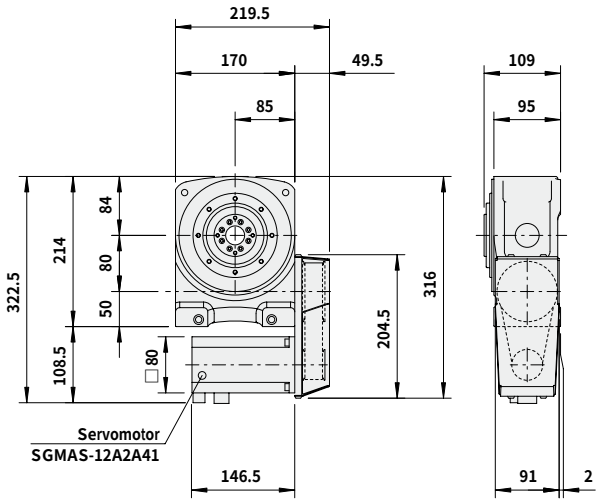
## Example of servomotor mounting

### RE80 Coupling specifications




★Part of the drive section sticks out from the housing and output table surface.

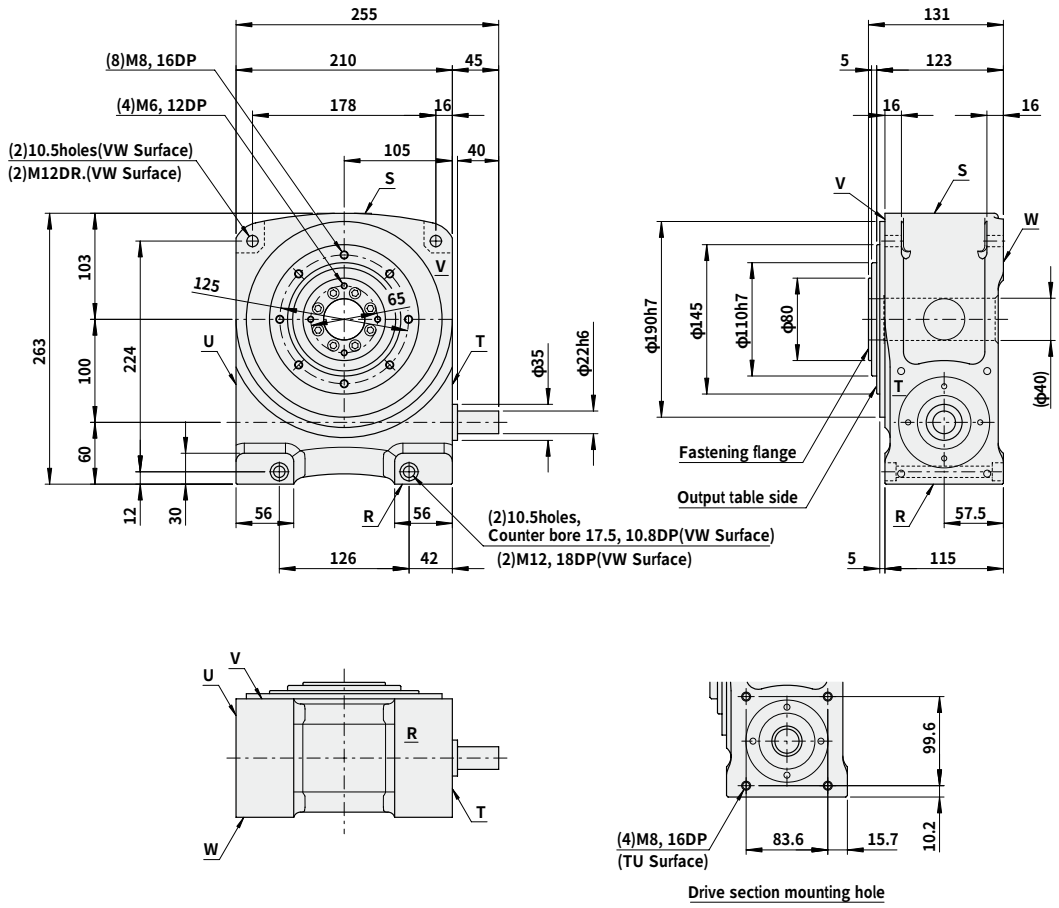
### RE80 Timing belt specifications



# Dimensions

[Unit:mm]

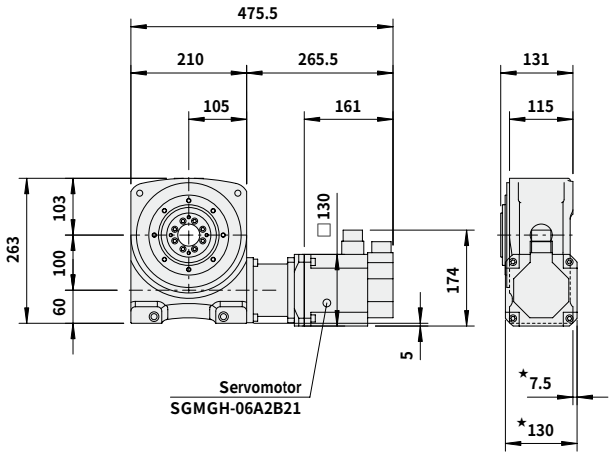
## RE100




Uses grease lubrication.

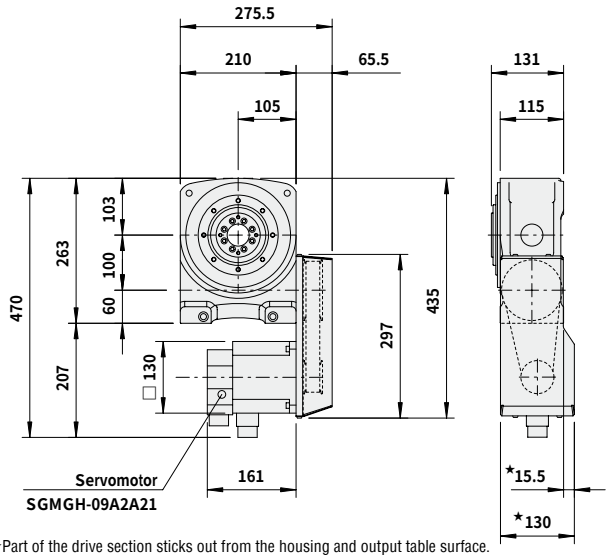
## Example of servomotor mounting

### RE100 Coupling specifications




★Part of the drive section sticks out from the housing and output table surface.

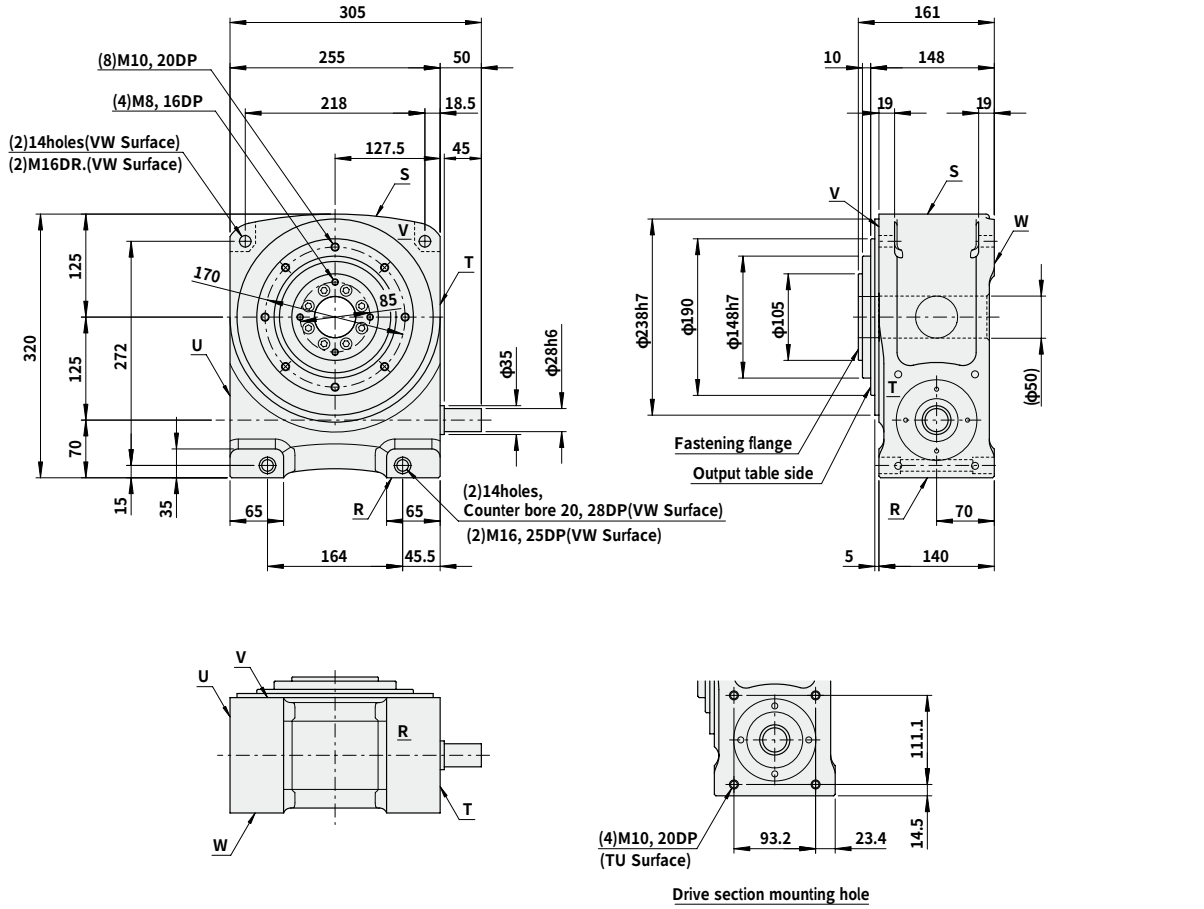
### RE100 Timing belt specifications




★Part of the drive section sticks out from the housing and output table surface.

[Unit:mm]

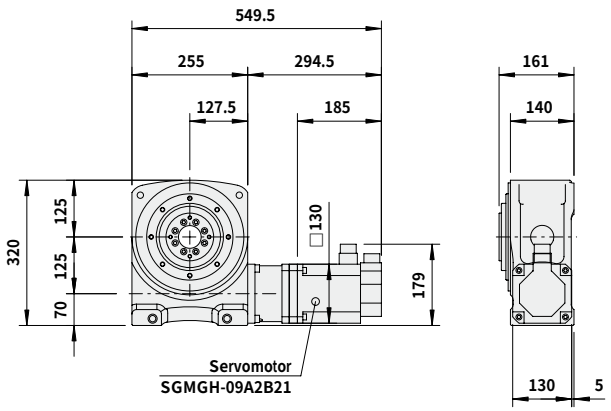
## RE125



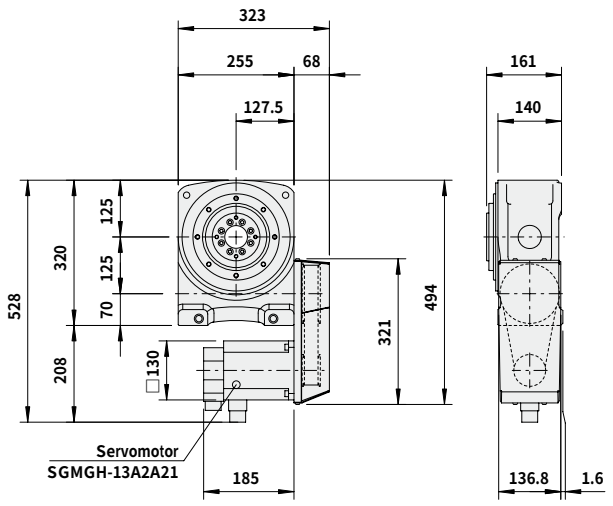

Uses grease lubrication.

## Example of servomotor mounting

### RE125 Coupling specifications



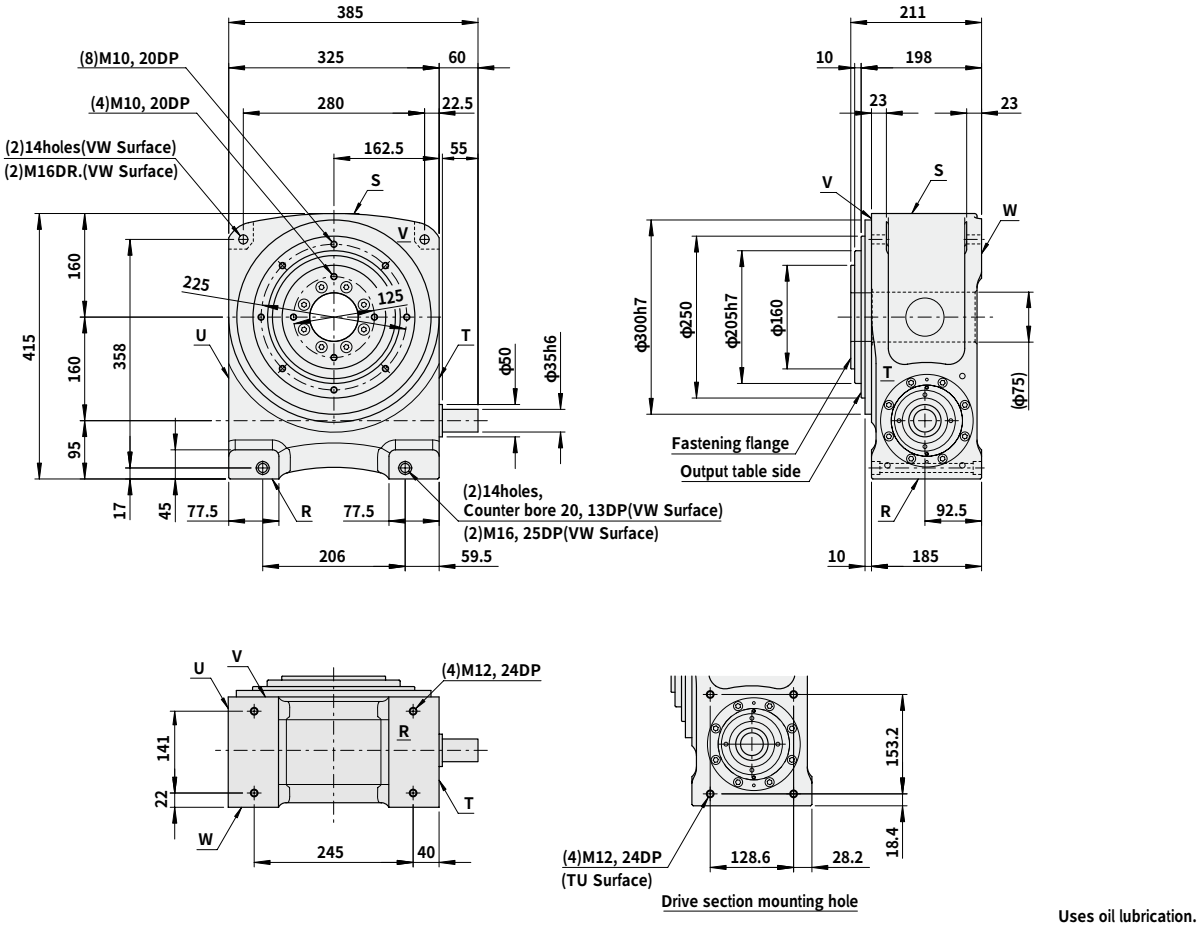

### RE125 Timing belt specifications



# Dimensions

[Unit:mm]

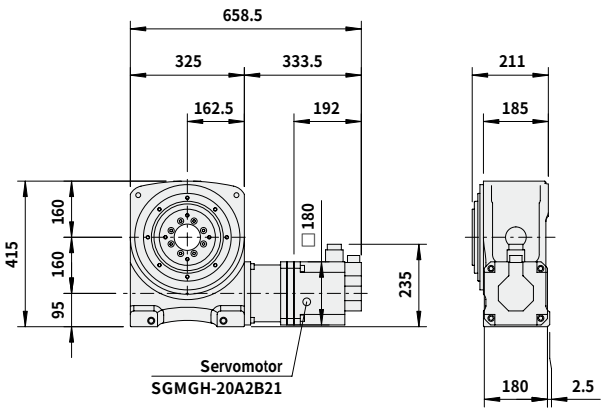
## RE160



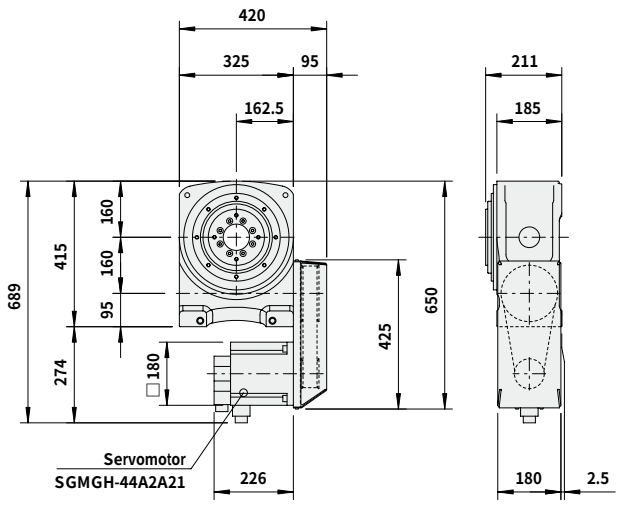

Uses oil lubrication.

## Example of servomotor mounting

### RE160 Coupling specifications

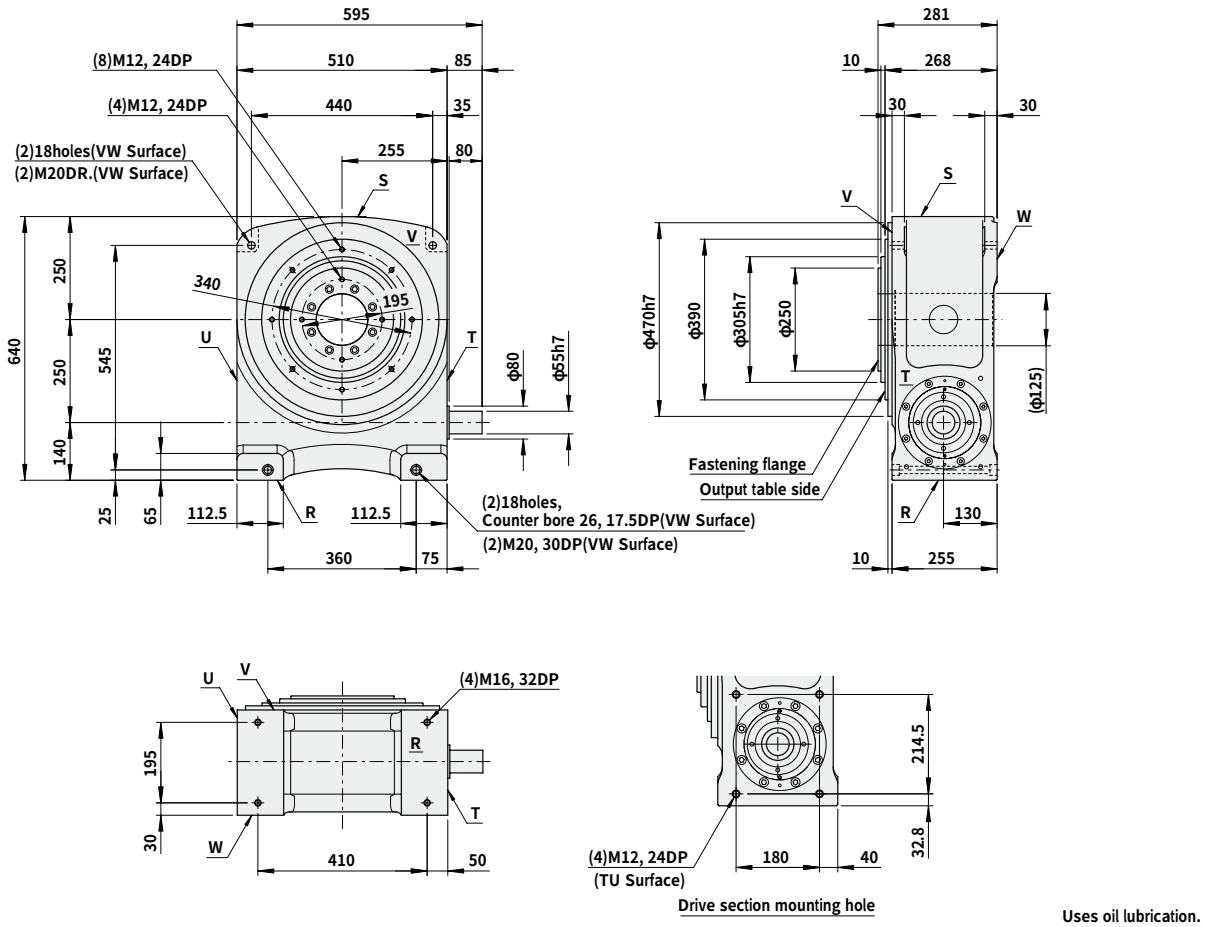



### RE160 Timing belt specifications



[Unit:mm]

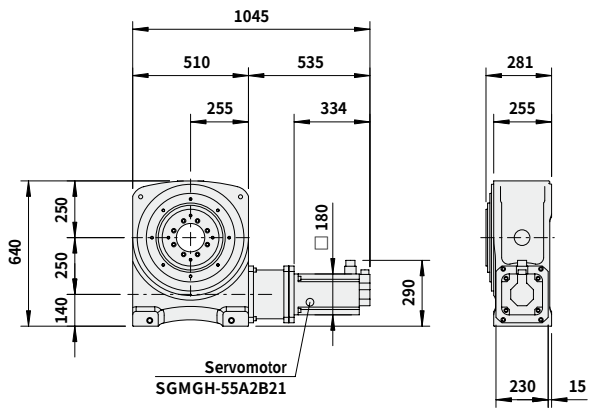
## RE250



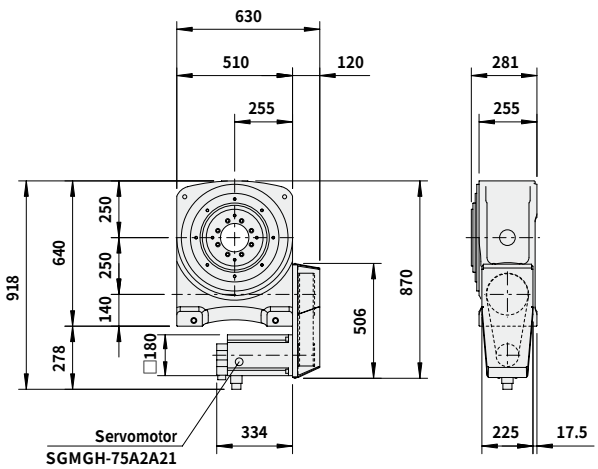

Uses oil lubrication.

## Example of servomotor mounting

### RE250 Coupling specifications




### RE250 Timing belt specifications

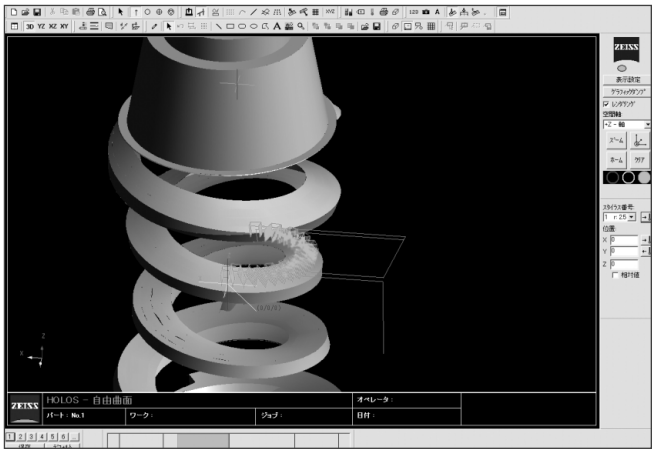


# Technical information

## Technology supporting performance and quality

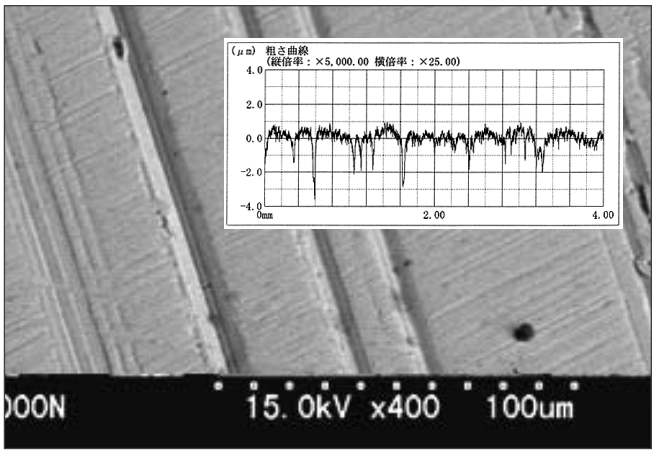
Data backed up by basic development results of Sankyo Seisakusho, and state-of-the-art research results, are provided as feedback to achieve the superior performance of ***RollerDrive***.

***RollerDrive*** requires high accuracy and special machining, and each unit is manufactured in a plant equipped with special-purpose ultra high-accuracy machining equipment and a clean room for assembly, and then shipped after passing a stringent quality/accuracy inspection. Materials used in the product, production equipment and packaging materials are all designed to enable recycling and to reduce environmental impact.




## 3-dimensional design, analysis and measurement technology

Accuracy management by data linkage between cutting-edge 3DCAD and 3D measuring devices.




## Material, machining know-how

Materials for achieving high performance and long service life, and manufacturing know-how based on the results of basic research into machining methods.

## Production plant

Strict management of temperature, cleanliness and environmental impact. Use of dedicated clean room for assembly.

# Precautions

## Limitations on the use of this product

- This product cannot be used in applications where operation of the product has a direct impact in human life, or can cause bodily harm to people.
  The scope of these use limitations includes the following applications:
  - i . Medical equipment
  - ii . Nuclear power related equipment
  - iii . Aerospace equipment
  - iv . Equipment for handling explosive, corrosive or toxic substances etc.
- Please consult with our company if you are considering use in one of the above applications.
- If there is a possibility that this product will be used in a final use location outside Japan, in weapons or equipment for weapon manufacture, then it may be subject to regulation due to the Foreign Exchange and Foreign Trade Control Law. Please take extra care with regard to the application and region of use, and properly submit applications and follow procedures if necessary.
- The permissible range of working ambient temperature for the RE Series is 5-40℃.

## Notes on information

- Specifications, dimensions and other information relating to this product provided in this catalog are subject to change without prior notice.
- The information in this catalog is current as of August 2008.
- Patent rights and copyrights for some mechanisms, trademarks, images, drawings and other material in this catalog all belong to Sankyo Seisakusho Co. Copying, reuse or distribution of any material in this catalog without the permission of Sankyo Seisakusho is forbidden.

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## The mark of high performance

### Logo mark

RollerDrive products are used and recognized as high-performance rotary drive units in a wide range of fields requiring precision operation. These include ultra-precise positioning in measuring devices, alignment stages and similar equipment, precision mechanisms in semiconductor manufacturing equipment, IC inspection units and transfer robots, and machine tools.
The “RollerDrive QUALITY” logo indicates that the customer's product or equipment incorporates RollerDrive technology for superior performance, and this helps to increase added value and achieve product differentiation.
If you would like to use this logo, please inquire with Sankyo Seisakusho Co.

RollerDrive QUALITY™
by SANKYO SEISAKUSHO Co.

# *RollerDrive* Related products

## Ultra-precise zero-backlash drive system

The *RollerDrive RA* Series employs a highly-rigid cross roller bearing with extremely small deflection in the output section. This is a revolutionary motion control unit for FA, and includes innovations such as an aluminum alloy case for greater lightness, and a specially designed method of fastening the motor shaft.

| | RA series | RE series |
|---|---|---|
| Angular transmission accuracy | ★★★ | ★★☆ |
| Surface runout | ★★★ | ★★☆ |
| Permissible work weight | ★★☆ | ★★★ |
| Compact | ★★★ | ★★☆ |
| Lightness | ★★☆ | ★☆☆ |

### *RollerDrive RA* Series specifications

| Item | Unit | RA40 | RA63 | RA80 | RA100 | RA125 |
|---|---|---|---|---|---|---|
| Gear ratio | | 15 | 20 | 20 | 20 | 20 |
| Permissible average input rotation speed | rpm | 1500 | 1500 | 1500 | 1500 | 1500 |
| Permissible maximum input rotation speed | rpm | 3000 | 3000 | 3000 | 3000 | 3000 |
| Upper limit torque at start/stop | N•m | 65.1 | 159.2 | 249.0 | 690.0 | 1155.6 |
| Angular transmission accuracy | arc.sec | ±45 | ±30 | ±20 | ±20 | ±20 |
| Surface runout | μm or less | 10 | 10 | 10 | 10 | 10 |
| Weight | kg | 2.5 | 5.6 | 11.6 | 21.5 | 36.3 |

## Zero-backlash CNC circular table

The precision movement and superior dynamic stability of *RollerDrive* are also a powerful force in the world of machine tools. The RC Series employs a CNC circular table designed to meet the need by machine tool manufacturers in recent years for greater speed (high-speed) and greater precision (high-accuracy), and this enables faithful output operation, with no disturbance in behavior, even in the presence of external forces. The high-accuracy and high-rigidity achieved with zero-backlash technology enable even heavy machining of hard steel, while achieving high-accuracy positioning with an angular transmission accuracy of less than 10 seconds.

### *RollerDrive RC* Series specifications

| Item | Unit | RC250 | RC315 | RC400 |
|---|---|---|---|---|
| Table diameter | mm | ϕ250 | ϕ315 | ϕ400 |
| Gear ratio | | 60 | 60 | 60 |
| Output maximum rotation speed | rpm | 50 | 50 | 50 |
| Output rated torque | N•m | 336 | 504 | 924 |
| Output maximum torque | N•m | 960 | 1440 | 2640 |
| Indexing accuracy | arc.sec | ±10 | ±10 | ±10 |
| Weight | kg | 170 | 280 | 410 |

The "ZERO-Backlash" reducer

# RollerDrive

## RE series

For the latest information, or to download selection software, please go to:

www.rollerdrive.com

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Dealer

For the latest information, or to download selection software, please go to:

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