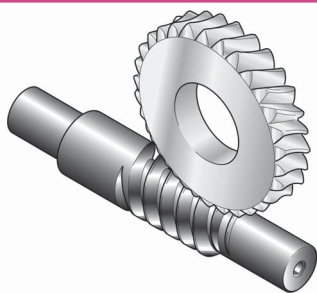
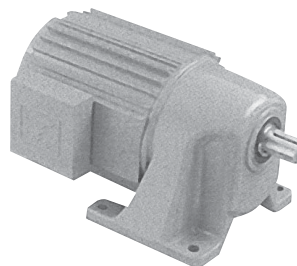


### Ideal combination of worm gear and helical gear!!

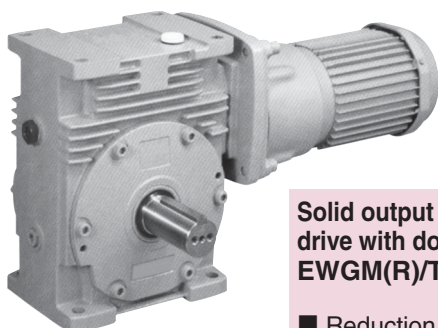
Worm gear



Gear motor

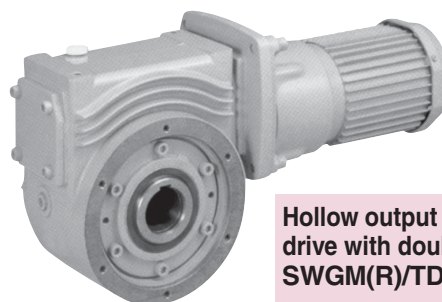


Helical worm motor



**Solid output type, right angle drive with double reduction EWGM(R)/TDGM(R)-S**

- Reduction ratio: 1/100 to 1/3600
- Motor: 0.1 to 2.2 kW



**Hollow output type, right angle drive with double reduction SWGM(R)/TDGM(R)-H**

- Reduction ratio: 1/100 to 1/3600
- Motor: 0.1 to 2.2 kW

## Features



**Tough**

With high reduction, the strength of the last gear is key. TERUS series uses a worm gear for the last gear, making this worm gear motor impervious to foreign material intrusion.



**Compact**

The combination of helical gear and worm gear tightly integrates right-angle and high reduction drive in a single unit. This contributes to more compact design of your equipment, and cost savings due to fewer components.



**Silent**

This series combines a quiet worm gear and a gear motor designed to be as quiet as possible. Widely used in theatrical equipment where silence is a must.



**Extensive**

Taking advantage of the wide range of options offered for gear motors, this series is compatible with various requirements such as international standards (CE, UL, CCC, etc.), different voltages, outdoor specifications, and inverter motors.

# Combinations

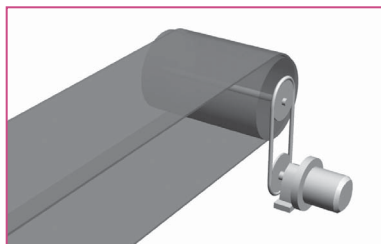
Reduces footprint of your equipment and save your cost by using less components!!

## A Standard package

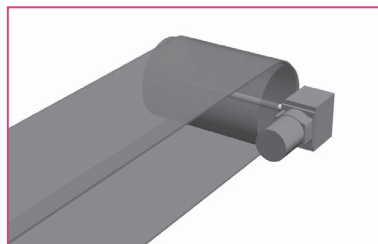
High efficiency and reduction ratio will meet a wide range of applications

### Conveyor drives

Ideal for applications that demand compact right angle drives with high reductions. It will reduce your equipment footprint, number of components, and assembly hours (cost reductions).



Geared motor + chain + sprocket



TERUS Series

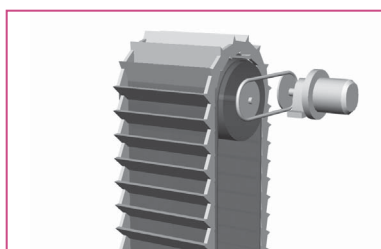
- Motor: 0.1 to 2.2 kW
- Reduction ratio: 1/100 to 1/3600

Typical applications:  
low-speed conveyors, drying kilns

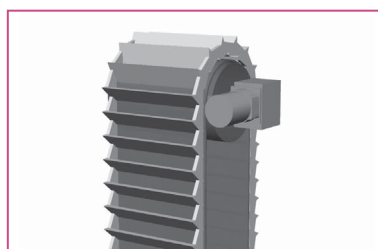
## B Self-locking package

Suitable for lifts, elevators, reversing machines, and etc.

### Bucket elevators



Brake motor + coupling +  
worm gear reducer + chain + sprocket



TERUS Series

- Motor: 0.1 to 2.2 kW
- Reduction ratio: 1/100 to 1/1800

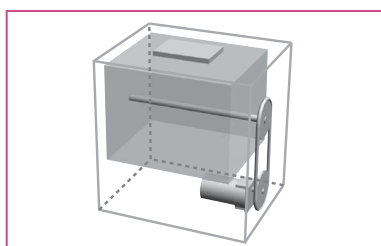
Typical applications:  
Reversing machines, opening/  
closing devices, inclined conveyors

## C Tough package

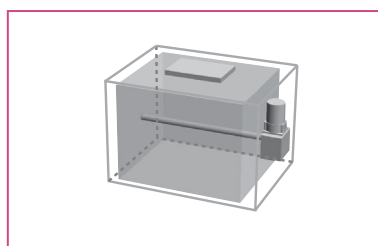
Tough gear train designed to withstand expected shocks.

### Garbage disposers

Compact design but still capable of handling the same payload.  
Lower inlet can also make garbage disposal easier.



Geared motor + chain + sprocket



TERUS Series

- Motor: 0.1 to 2.2 kW
- Reduction ratio: 1/100 to 1/1200

Typical applications:  
garbage disposers, crushers  
Mixers

## X Made to order

Made to order for drop-in solutions.

Various combination will meet your needs.

**Troi Drive  
Worm Power Drive  
+  
Gear Motor**



**Free  
combination**

- Motor: 0.1 to 2.2 kW
- Reduction ratio: 1/100 to 1/3600

### Standard Models

#### A Type: Standard Package [0.1 to 2.2 kW]

All-purpose model, high efficiency and high reduction gears will meet a wide range of applications.

| Motor size \ Nominal reduction ratio | 1/100 | 1/150 | 1/200 | 1/250 | 1/300 | 1/400 | 1/500 | 1/600 | 1/800 | 1/1000 | 1/1200 | 1/1500 | 1/1800 | 1/2400 | 1/3000 | 1/3600 |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| 0.1 kW                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      | ○      | ○      | ○      |
| 0.2 kW                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      | ○      | ○      | ○      |
| 0.4 kW                               | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      | ○      | ○      | ○      |
| 0.75 kW                              | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      | ○      | ○      | ○      |
| 1.5 kW                               | ○     | □     | ○     | ○     | ○     | ○     | ○     | ○     | ○     | □      | ○      | ○      | ○      |        |        |        |
| 2.2 kW                               | ○     | □     | ○     | □     | ○     | ○     | □     |       |       |        |        |        |        |        |        |        |

○: Standard product □: Made to order.

#### B Type: Self-locking Package [0.1 to 2.2 kW]

Self-locking type, suitable for lifts, elevators, reversing machines, and etc.

- Gear motor: Sized based on durability of gear teeth.
- Worm gear: Sized to achieve self-locking effect, and focused on durability of worm gear at 1/50 or 1/60 ratios.

| Motor size \ Reduction ratio | 1/250 | 1/300 | 1/500 | 1/600 | 1/750 | 1/1000 | 1/1200 | 1/1500 | 1/1800 |
|------------------------------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| 0.1 kW                       | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      |
| 0.2 kW                       | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      |
| 0.4 kW                       | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      |
| 0.75 kW                      | ○     | ○     | ○     | ○     | ○     | ○      | ○      | ○      | ○      |
| 1.5 kW                       | ○     | ○     | ○     | ○     | □     | ○      | ○      |        | ○      |
| 2.2 kW                       | ○     | ○     | ○     | ○     |       |        | ○      |        | ○      |

○: Standard product □: Made to order.

#### C Type: Tough Package [0.1 to 2.2 kW]

Tough gear train designed to withstand expected shocks.

- Gear motor: Sized based on durability of gear teeth.
- Worm gear: Sized based on worm gear durability against impacts.

| Motor size \ Reduction ratio | 1/200 | 1/300 | 1/400 | 1/500 | 1/600 | 1/800 | 1/1000 | 1/1200 |
|------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|
| 0.1 kW                       | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      |
| 0.2 kW                       | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      |
| 0.4 kW                       | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      |
| 0.75 kW                      | ○     | ○     | ○     | ○     | ○     | ○     | ○      | ○      |
| 1.5 kW                       | ○     | ○     | ○     | ○     | ○     | ○     | □      | ○      |
| 2.2 kW                       | ○     | ○     | ○     | □     |       |       |        |        |

○: Standard product □: Made to order.

#### X Type: Made to Order

The TERUS can be customized to meet your needs.

Please let us know what you expect to TERUS system, and we will select the best gear combination.

[Applicable range] (1) Geared motor: 0.1 to 2.2 kW motor, reduction ratio = 1/5 to 1/200

(2) Troi Drive / Worm Power Drive: Size 25 to 315, reduction ratio = 1/10 to 1/ 60

\* Consult Tsubaki representative for transfer capacity and other characteristics of your combination.

\* Some combinations may not be possible due to size, mass, and other limitations.

# Product Specifications

|                    |                    |                                                                                         |                                                     |
|--------------------|--------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------|
| Motor              | Output             | Three-phase 0.1, 0.2, 0.4 kW<br>With/without brake                                      | Three-phase 0.75, 1.5, 2.2 kW<br>With/without brake |
|                    | Efficiency class   | —                                                                                       | Premium efficiency: IE3                             |
|                    | Power source       | 200/200/220 V 50/60/60 Hz                                                               | 200/200/220 V 50/60/60 Hz                           |
|                    | Poles              | 4                                                                                       |                                                     |
|                    | Protection         | 0.1 kW Totally enclosed (IP44), 0.2 to 0.4 kW Totally enclosed fan-cooled (IP44)        | Totally enclosed fan-cooled (IP44)                  |
|                    | Cooling            | 0.1 kW Air-cooled (IC410), 0.2 to 0.4 kW Self-cooled (IC411)                            | Self-cooled (IC411)                                 |
|                    | Rating             | Continuous (S1)                                                                         |                                                     |
|                    | Insulation class   | 120 (E)                                                                                 | 155 (F)                                             |
|                    | Brake unit         | Brake                                                                                   | DC electromagnetic brake                            |
|                    |                    | Power source                                                                            | 90 VDC                                              |
|                    |                    | Braking system                                                                          | Engaged when de-energized                           |
|                    |                    | Rated torque                                                                            | Rated motor torque 150% or more                     |
|                    |                    | Insulation class                                                                        | 130 (B)                                             |
| Reducer            | Reduction ratio    | 1/100 to 1/3600                                                                         |                                                     |
|                    | Lubrication method | Geared motor: grease lubrication Worm gear reducer: oil lubrication                     |                                                     |
|                    | Keyway             | New JIS standard JIS B1301-1976 (key supplied with solid shaft models)                  |                                                     |
|                    | Output shaft end   | Tap holes provided (except for hollow shafts)                                           |                                                     |
| Ambient conditions | Installation       | Indoors free of dust and water                                                          |                                                     |
|                    | Temperature        | 0 to 40°C                                                                               |                                                     |
|                    | Humidity           | 85% or less (no condensation)                                                           |                                                     |
|                    | Altitude           | 1000 m or less above sea level                                                          |                                                     |
|                    | Atmosphere         | Free of corrosive and explosive gases, steam, condensation, and have little or no dust. |                                                     |
|                    | Mounting direction | Horizontal or vertical (models EWJGM/SWJGM series installs in any direction)            |                                                     |
| Paint color        |                    | Munsell 2.5G6/3                                                                         |                                                     |

Note) Protection rating of brake motor: IP20  
Refer to page 14 for motor specifications.

## Lubrication Oil

[Worm gear]

A and C types: Daphne Alpha Oil TE380 (IDEMITSU)

B type: Mobil Cylinder Oil 600W (Exxon Mobil)

[Gear motor]

NIGHTIGHT LMS No. 000 (Nippon Grease)

X type: Refer to the instruction manual or contact Tsubaki representative.

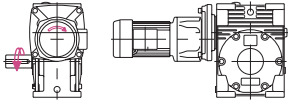
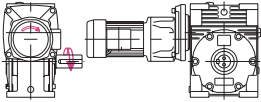
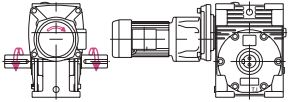
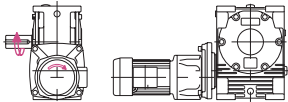
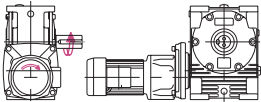
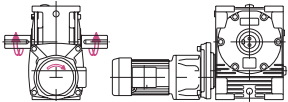
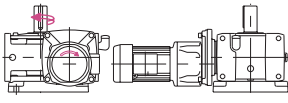
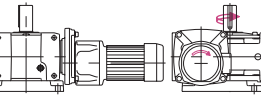
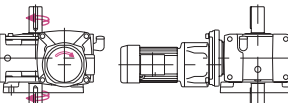
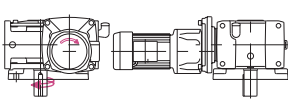
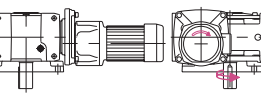
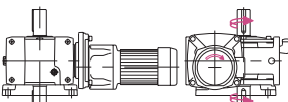
### Model

|                                                        | Series                                                                                                                                                                                                                                                                                                                                     | Worm size  | Output shaft style | Specifications | Installation direction | Total reduction ratio | Shaft arrangement                                                             | Motor size | Brake    | Motor option | Reducer option |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|----------------|------------------------|-----------------------|-------------------------------------------------------------------------------|------------|----------|--------------|----------------|
| A type<br>Standard package                             | <b>EWGM</b>                                                                                                                                                                                                                                                                                                                                | <b>125</b> | <b>S</b>           | <b>A</b>       | <b>T</b>               | <b>3600</b>           | <b>L</b>                                                                      | <b>020</b> | <b>B</b> |              |                |
| B type<br>Self-locking package                         | <b>SWGM</b>                                                                                                                                                                                                                                                                                                                                | <b>100</b> | <b>H</b>           | <b>B</b>       | <b>V</b>               | <b>1200</b>           | <b>LF</b>                                                                     | <b>010</b> |          | <b>ZH</b>    | <b>- K</b>     |
| C type<br>Tough package                                | <b>TDGMR</b>                                                                                                                                                                                                                                                                                                                               | <b>200</b> | <b>H</b>           | <b>C</b>       | <b>B</b>               | <b>3000</b>           | <b>DF</b>                                                                     | <b>075</b> | <b>B</b> | <b>W</b>     |                |
| X type<br>Made to order                                | <b>TDGM</b>                                                                                                                                                                                                                                                                                                                                | <b>150</b> | <b>S</b>           | <b>X</b>       | <b>V</b>               | <b>4800</b>           | <b>LF</b>                                                                     | <b>010</b> |          |              |                |
|                                                        | (1)                                                                                                                                                                                                                                                                                                                                        | (2)        | (3)                | (4)            | (5)                    | (6)                   | (7)                                                                           | (8)        | (9)      | (10)         | (11)           |
| (1) Series                                             | EWJGM, EWGM(R), SWJGM, SWGM(R), TDGM(R)<br>[with 0.75 kW or larger IE3 motor] EWGMR, SWGMR, TDGMR                                                                                                                                                                                                                                          |            |                    |                |                        |                       |                                                                               |            |          |              |                |
| (2) Worm size<br>(Center distance: mm)                 | EWJGM: 50, 63, 70   EWGM(R): 80, 100, 125, 150, 175, 200<br>SWJGM: 50, 63, 70   SWGM(R): 80, 100, 125, 150, 175, 200<br>TDGM(R): 175, 200, 225                                                                                                                                                                                             |            |                    |                |                        |                       |                                                                               |            |          |              |                |
| (3) Output shaft style                                 | S: Solid (EWJGM, EWGM(R), TDGM(R))   H: Hollow (SWJGM, SWGM(R), TDGM(R))                                                                                                                                                                                                                                                                   |            |                    |                |                        |                       |                                                                               |            |          |              |                |
| (4) Combinations                                       | A: Standard   B: Self-locking   C: Tough   X: Made to order                                                                                                                                                                                                                                                                                |            |                    |                |                        |                       |                                                                               |            |          |              |                |
| (5) Installation direction                             | T: Output shaft horizontal   B: Output shaft horizontal   V: Output shaft vertical   E: Output shaft horizontal (EWJGM, SWJGM)                                                                                                                                                                                                             |            |                    |                |                        |                       |                                                                               |            |          |              |                |
| (6) Total reduction ratio<br>(Nominal reduction ratio) | (Ex.) 1200 = 1/1200   600 = 1/600                                                                                                                                                                                                                                                                                                          |            |                    |                |                        |                       |                                                                               |            |          |              |                |
| (7) Shaft arrangement<br>* When viewed from motor      | [S: Solid shaft]<br>Installation T/B/E: L, R, LR<br>Installation V: LU, RU, LD, RD, LUD, RUD                                                                                                                                                                                                                                               |            |                    |                |                        |                       | [H: Hollow shaft]<br>Installation T/B/E: LF, RF, DF<br>Installation V: LF, RF |            |          |              |                |
| (8) Motor size                                         | (Ex.) 020 = 3-phase 0.2 kW                                                                                                                                                                                                                                                                                                                 |            |                    |                |                        |                       |                                                                               |            |          |              |                |
| (9) With/without brake                                 | No code: Without brake   B: With brake                                                                                                                                                                                                                                                                                                     |            |                    |                |                        |                       |                                                                               |            |          |              |                |
| (10) Motor option                                      | Z: Inverter motor   W: Outdoor type   E: With rotary encoder<br>V: 400 V class 4)   V1: 380 V 50 Hz   V2: 380 V 60 Hz   V3: 415 V 50 Hz   V4: 460 V 60 Hz<br>N: 200 V class CE compliant   N2: 200 V class UL compliant   N3: 200 V class CCC compliant<br>H: Hard terminal box   Q: Manual quick-release brake<br>M: Manual release shaft |            |                    |                |                        |                       |                                                                               |            |          |              |                |
| (11) Reducer option                                    | K: Power-Lock   TB: Taper bush                                                                                                                                                                                                                                                                                                             |            |                    |                |                        |                       |                                                                               |            |          |              |                |

- Note 1) Refer to our properties chart for motor size, reducer size, and reduction ratio combinations.  
 2) Contact Tsubaki representative for combination of model and option codes. Option symbol combinations.  
 3) 400 V class voltage frequency  
     0.1 to 0.4 kW: 400/400/440 V 50/60/60 Hz  
     0.75 to 2.2 kW: 380/400/400/440 V 50/50/60/60 Hz

# Shaft Arrangement

## Solid Output Shaft [S] EWJGM-S/EWGM(R)-S/TDGM(R)-S

|                        |   | Shaft arrangement                                                                                |                                                                                                  |                                                                                                      |
|------------------------|---|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
|                        |   | Single output shaft                                                                              |                                                                                                  | Double output shaft                                                                                  |
| Installation direction | T | <br>T - L (E-L) | <br>T - R (E-R) | <br>T - LR (E-LR) |
|                        | B | <br>B - L       | <br>B - R       | <br>B - LR        |
|                        | V | <br>V - LU      | <br>V - RU      | <br>V - LUD       |
|                        |   | <br>V - LD      | <br>V - RD      | <br>V - RUD       |

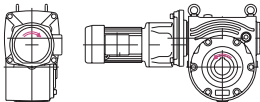
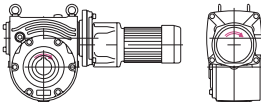
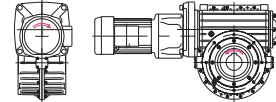
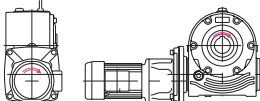
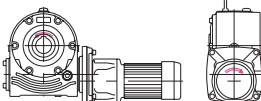
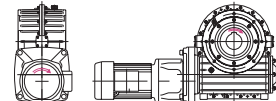
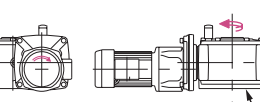
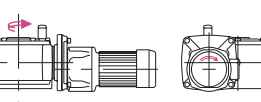
Hollow output shaft: contact Tsubaki representative.

EWJGM installation direction: E type only and can be installed in any direction.

Motor and output rotational relationship: depend on the type and reduction ratio.

Refer to the characteristic tables on pages 179 to 186 for more information.

## Hollow Output Shaft [H] SWJGM-H/SWGM(R)-H/TDGM(R)-H

|                        |   | Shaft arrangement                                                                                                  |                                                                                                                 |                                                                                                                      |
|------------------------|---|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
|                        |   | Single-faced flange (size 70 to 200)                                                                               |                                                                                                                 | Double-faced flange (size 50, 63, 225)                                                                               |
| Installation direction | T | <br>T - LF                      | <br>T - RF                   | <br>T - DF                      |
|                        | B | <br>B - LF (E-LF)               | <br>B - RF (E-RF)            | <br>B - DF (E-DF)               |
|                        | V | <br>V - LF<br>Installation face | <br>Installation face V - RF | Note) V type<br>Installation face:<br>bottom side only<br>Size 225 shaft arrangement:<br>double output not available |

Solid output shaft: contact Tsubaki representative.

SWJGM installation direction: E type only and can be installed in any direction.

Motor and output rotational relationship: depend on the type and reduction ratio.

Refer to the characteristic tables on page 179 to 186 for more information.

# Option

Ex.: **P2** **D2** **C1**  
(12) (13) (14)

|      |                                  |                                                                                                                             |
|------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| (12) | [Terminal box position]          | Refer to page 225.<br>P2: 180° swing                                                                                        |
| (13) | [Terminal box outlet directions] | Refer to pages 224 and 225.<br>No code: fan cover side<br>D1: 90° swing cw<br>D2: 180° swing cw<br>D3: 270° swing cw        |
| (14) | [Paint color]                    | C0: light gray (Munsell N7.5)<br>C1: light silver metallic<br>C2: ivory white (Munsell 7.5Y9/1)<br>C3: dark silver metallic |

## Procedures

Follow these procedures for sizing TERUS EWJGM/EWGM(R)/SWJGM/SWGM(R)/TDGM(R) series integrated gear reducers. In order to select your model, make sure on motor capacity, load torque, input speed, reduction ratio, load characteristics, operating hours, start/stop frequency, and etc.

### 1. Select package: A/B/C/X type

Select the suitable package according to your application.

A type: Standard package - All-purpose model, high efficiency and high reduction gears for a wide range of applications.

B type: Self-locking package - Self-locking type, suitable for lifts, elevators, reversing machines, and etc.

C type: Tough package - Tough gear train designed to withstand expected shock.

X type: Made to order - Freely combine gear motor/worm sizes and reduction ratios.

### 2. Determine service factor

All allowable torque on output shaft and motor kW values in the Characteristics table are when the service factor (sf) is 1.0. Choose the service factor (sf) depending on the load characteristics, operating hours, and start frequency. Use the larger value as the compensation factor. Refer to the table of Load Categories by Machine Type for the load characteristics. If you cannot find your machine, choose the closest or contact us for assistance.

Table 1 Service factor table (Sf)

| Motor<br>Load characteristics | Operating hours (per day) |             |             |             |
|-------------------------------|---------------------------|-------------|-------------|-------------|
|                               | 0.5                       | 2           | 10          | 24          |
| U: Constant load              | 1.00 (1.00)               | 1.00 (1.00) | 1.00 (1.25) | 1.25 (1.50) |
| M: Load with light impact     | 1.00 (1.00)               | 1.00 (1.25) | 1.25 (1.50) | 1.50 (1.75) |
| H: Load with heavy impact     | 1.00 (1.25)               | 1.25 (1.50) | 1.50 (1.75) | 1.75 (2.00) |

Note) 1. Use the figure within ( ) if the reducer is to be started more than 10 times per hour.  
2. The service factors in the table above are general guidelines. Determine the usage factor based on actual usage conditions.

### 3. Determine compensation torque

Use formula 1 and multiple the required load torque or required motor kW by the compensation factor to determine the compensation torque.

Compensation kW = load kW × compensation factor ... (Formula 1)

Compensation torque = load torque × compensation factor ... (Formula 1)

### 4. Determine reduction ratio

Use the actual input speed you will be using, and the required output speed to determine the reduction ratio.

Note) The reduction ratios for TERUS series are given as nominal reduction ratios. Always check the actual reduction ratios.

### 5. Determine size and model number

From the allowable torque on output shaft in the Characteristics table for each type, select the size and model that satisfies the compensation kW or compensation torque.

### 6. Check shaft load

Use formula 3 to check that the radial load on the shaft is within the allowable radial load for each series.

$$\text{Allowable radial load} \geq \frac{T \times f \times L_f}{R} \dots \dots \dots (\text{Formula 3})$$

T: Compensation torque

f: O.H.L. factor

Lf: Point of action factor

R: Pitch radius of sprockets, pulleys, etc.

O.H.L. factor (f)

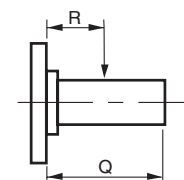
|              |      |
|--------------|------|
| Chain        | 1.00 |
| Gear         | 1.25 |
| Toothed belt | 1.25 |

(Solid shaft type)

Point of action factor (Lf)

$$R \leq \frac{Q}{2} \dots \dots L_f = 1$$

$$R > \frac{Q}{2} \dots \dots L_f = \frac{2R}{Q}$$



(Check axial load)

If axial loads are anticipated on the output shaft, make sure they are within the allowable axial loads for each series.

(Alternating loads)

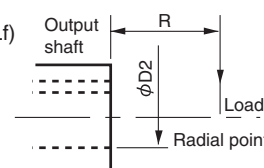
If alternating loads act upon hollow shaft on the TDGM (including outputs with a Power-Lock), it is necessary to check the strength of the tapped holes in the housing. Check the type of load that occurs and contact us for assistance.

(Hollow shaft type)

Point of action factor (Lf)

$$R \leq D_2 \dots \dots L_f = 1$$

$$R > D_2 \dots \dots L_f = \frac{R}{D_2}$$



### 7. Determine size and model number

If the allowable torque on output shaft does not satisfy the required torque, consider increasing the size.

Check the shaft load again, and then select the final model number.

# Selection Example

## [Conditions]

- Application: Mixer (kneader)
- Motor: 0.2 kW, 1450 r/min
- Output shaft speed: 1.45 r/min
- Output shaft torque: 605 N
- Output shaft load: Radial load 500 N
- Operating hours: 10 hours/day
- Operating frequency: 1/hour
- Installation: Hollow, vertical

## [Sizing]

1. Select package type: A, B, C, or X type

C type: with tough gear from your application.

2. Determine service factor

From the Load Categories by Machine Type (table 2), a mixer (kneader) has a load characteristic of M, which gives  $sf = 1.25$  from the service factor table (table 1).

3. Determine compensation torque

Use the service factor and load torque to obtain the compensation torque.

Compensation torque =  $605 \text{ N}\cdot\text{m} \times 1.25 \approx 726 \text{ N}\cdot\text{m}$

4. Determine reduction ratio

Use the motor speed and output speed to obtain the reduction ratio.

Reduction ratio =  $1450 \text{ r/min} \div 1.45 \text{ r/min} \approx 1000$

5. Determine size

From the Characteristics table for C type, select the size that satisfies the compensation torque and reduction ratio.

Size: SWGM100HC - 1/1000, motor: 0.2 kW

6. Check shaft load

Check that the radial load on the output shaft is within the allowable load.

Radial load:  $500 \text{ N} < \text{allowable radial load} = 6478 \text{ N}$  and is acceptable

7. Determine size and model number

From vertical mount (V type), hollow output shaft (H), your selection is **Model: SWGM100HCV1000RF(LF)020**.

## Notes

### ● Transfer capacity before oil temperature settles

The transfer capacities listed in this catalog assume the reducer is driving a load rate of 100% using the recommended oil in continuous operation, and at constant oil temperature.

Efficiencies will lower during cold starts, and when the oil temperature has yet to stabilize due to frequent starts and stops. This is due to the low fluidity of the lubrication oil which increases the mixing resistance of the oil, thus resulting in less transfer capacity than published in our catalog.

To make a general estimate, discount the capacity using the ratios given below.

Efficiency ratio (reference) to use before oil temperature settles.

| Worm gear reduction ratio | Efficiency ratio |
|---------------------------|------------------|
| 10 to 15                  | -2% to -4%       |
| 20 to 30                  | -3% to -6%       |
| 40 to 60                  | -6% to -8%       |

\* Refer to the worm gear reduction ratio for TERUS combinations in the Characteristics table.

### ● Self-locking

A worm gear reducer is said to be self-locking if the input shaft does not begin to turn when force is applied to the output shaft to turn it from a standstill condition. If, in fact, the input shaft turns but requires a large force on the output shaft, known as the braking effect, the reducer is said to have self-locking properties.

These effects are factors of the lead angle and surface condition of the teeth on the worm gear, as well as lubrication. Our standard EWJGM/EWGM(R)/SWJGM(R)/SWGM(R) Series with a reduction ratio of 1/50, 1/60 and TDGM(R) Series with a reduction ratio of 1/60 can be expected to be self-locking from a standstill condition.

Other reduction ratios (1/10 to 1/40) can be expected to exhibit self-locking properties or, the braking effect.

\* Notes about self-locking and self-locking properties

- (1) Shocks or vibration may reduce the self-locking effect. Self-locking is not guaranteed. For applications that require the output to be held still, the user should furnish a brake or other means of restraint.
- (2) If the braking effect occurs in applications where an extremely heavy load inertia is being moved (such as equipment that travels or swings), the self-locking effect or properties can be dangerous. For such applications, select a reduction ratio from 1/10 to 1/20.

### Characteristics

#### A Type: Standard Package/Solid Output Shaft [S]

| Motor output (kW) | Nominal Reduction ratio | TERUS Model No. | TERUS combinations |                 |           |                 | Actual reduction ratio | Output shaft speed r/min |            | Allowable torque on output shaft |              |              |     | Allowable radial load on output | Mounting direction T/B/E External dimensions |      | Mounting direction V External dimensions |      |             |
|-------------------|-------------------------|-----------------|--------------------|-----------------|-----------|-----------------|------------------------|--------------------------|------------|----------------------------------|--------------|--------------|-----|---------------------------------|----------------------------------------------|------|------------------------------------------|------|-------------|
|                   |                         |                 | GMTA               |                 | Worm      |                 |                        |                          |            | 50 Hz                            |              | 60 Hz        |     |                                 | N {kgf}                                      | Page | Motor model                              | Page | Motor model |
|                   |                         |                 | Frame No.          | Reduction ratio | Frame No. | Reduction ratio |                        | 50 Hz                    | 60 Hz      | N·m {kgf·m}                      | N·m {kgf·m}  |              |     |                                 |                                              |      |                                          |      |             |
| 0.1               | 100                     | EWJGM50S        | 18                 | 10              | 50        | 10              | 97.79                  | 15.3                     | 18.4       | 47 {4.8}                         | 39 {4.0}     | 2558 {261}   | 188 | AA2                             | 190                                          | BA2  |                                          |      |             |
|                   | 150                     |                 |                    | 15              |           | 10              | 148.00                 | 10.1                     | 12.2       | 70 {7.1}                         | 59 {6.0}     | 2558 {261}   |     |                                 |                                              |      |                                          |      |             |
|                   | 200                     |                 |                    | 20              |           | 10              | 198.21                 | 7.57                     | 9.08       | 93 {9.5}                         | 78 {7.9}     | 2558 {261}   |     |                                 |                                              |      |                                          |      |             |
|                   | 250                     |                 |                    | 25              |           | 10              | 248.43                 | 6.04                     | 7.25       | 109 {11}                         | 97 {9.9}     | 2558 {261}   |     |                                 |                                              |      |                                          |      |             |
|                   | 300                     | EWJGM63S        | 18                 | 30              | 63        | 10              | 294.64                 | 5.09                     | 6.11       | 136 {14}                         | 114 {12}     | 4155 {424}   | 188 | AB2                             | 190                                          | BB2  |                                          |      |             |
|                   | 400                     |                 |                    | 40              |           | 10              | 401.53                 | 3.74                     | 4.48       | 184 {19}                         | 154 {16}     | 4155 {424}   |     |                                 |                                              |      |                                          |      |             |
|                   | 500                     |                 |                    | 50              |           | 10              | 498.17                 | 3.01                     | 3.61       | 224 {23}                         | 190 {19}     | 4155 {424}   |     |                                 |                                              |      |                                          |      |             |
|                   | 600                     |                 |                    | 40              |           | 15              | 602.30                 | 2.49                     | 2.99       | 224 {23}                         | 211 {22}     | 4155 {424}   |     |                                 |                                              |      |                                          |      |             |
|                   | 800                     | EWJGM70S        | 18                 | 40              | 70        | 20              | 803.06                 | 1.87                     | 2.24       | 315 {32}                         | 265 {27}     | 5674 {579}   | 188 | AC1                             | 190                                          | BC1  |                                          |      |             |
|                   | 1000                    | EWGM80S         | 18                 | 50              | 80        | 20              | 996.34                 | 1.51                     | 1.81       | 397 {41}                         | 334 {34}     | 7575 {773}   | 188 | AD1                             | 190                                          | BD1  |                                          |      |             |
|                   | 1200                    | EWGM100S        | 24                 | 120             | 100       | 10              | 1221.60                | 1.23                     | 1.47       | 538 {55}                         | 451 {46}     | 11505 {1174} | 188 | AE2                             | 190                                          | BE2  |                                          |      |             |
|                   | 1500                    |                 |                    | 100             |           | 15              | 1494.66                | 1.00                     | 1.20       | 607 {62}                         | 511 {52}     | 11505 {1174} |     |                                 |                                              |      |                                          |      |             |
|                   | 1800                    |                 |                    | 120             |           | 15              | 1832.40                | 0.82                     | 0.98       | 738 {75}                         | 620 {63}     | 11505 {1174} |     |                                 |                                              |      |                                          |      |             |
|                   | 2400                    |                 |                    | 120             |           | 20              | 2443.20                | 0.61                     | 0.74       | 844 {86}                         | 763 {78}     | 11505 {1174} |     |                                 |                                              |      |                                          |      |             |
|                   | 3000                    | EWGM125S        | 24                 | 120             | 125       | 25              | 3054.00                | 0.49                     | 0.59       | 1090 {111}                       | 918 {94}     | 15131 {1544} | 188 | AF1                             | 190                                          | BF1  |                                          |      |             |
|                   | 3600                    |                 |                    | 120             |           | 30              | 3664.80                | 0.41                     | 0.49       | 1162 {119}                       | 982 {100}    | 15131 {1544} |     |                                 |                                              |      |                                          |      |             |
| 0.2               | 100                     | EWJGM50S        | 18                 | 10              | 50        | 10              | 97.79                  | 15.3                     | 18.4       | 93.9 {9.6}                       | 79 {8.1}     | 2558 {261}   | 188 | AA3                             | 190                                          | BA3  |                                          |      |             |
|                   | 150                     | EWJGM63S        | 18                 | 15              | 63        | 10              | 148.00                 | 10.1                     | 12.2       | 141 {14}                         | 118 {12}     | 4155 {424}   | 188 | AB4                             | 190                                          | BB4  |                                          |      |             |
|                   | 200                     |                 |                    | 20              |           | 10              | 198.21                 | 7.57                     | 9.08       | 186 {19}                         | 156 {16}     | 4155 {424}   |     |                                 |                                              |      |                                          |      |             |
|                   | 250                     |                 |                    | 25              |           | 10              | 248.43                 | 6.04                     | 7.25       | 224 {23}                         | 194 {20}     | 4155 {424}   |     |                                 |                                              |      |                                          |      |             |
|                   | 300                     |                 |                    | 20              |           | 15              | 297.32                 | 5.05                     | 6.05       | 224 {23}                         | 215 {22}     | 4155 {424}   |     |                                 |                                              |      |                                          |      |             |
|                   | 400                     | EWJGM70S        | 18                 | 20              | 70        | 20              | 396.42                 | 3.78                     | 4.54       | 315 {32}                         | 272 {28}     | 5674 {579}   | 188 | AC3                             | 190                                          | BC3  |                                          |      |             |
|                   | 500                     | EWGM80S         | 18                 | 25              | 80        | 20              | 496.86                 | 3.02                     | 3.62       | 409 {42}                         | 344 {35}     | 7575 {773}   | 188 | AD2                             | 190                                          | BD2  |                                          |      |             |
|                   | 600                     |                 | 24                 | 40              |           | 15              | 585.45                 | 2.56                     | 3.07       | 470 {48}                         | 421 {43}     | 7575 {773}   | 188 | AD3                             | 190                                          | BD3  |                                          |      |             |
|                   | 800                     | EWGM100S        | 24                 | 40              | 100       | 20              | 780.60                 | 1.92                     | 2.31       | 639 {65}                         | 537 {55}     | 11505 {1174} | 188 | AE4                             | 190                                          | BE4  |                                          |      |             |
|                   | 1000                    |                 |                    | 50              |           | 20              | 988.14                 | 1.52                     | 1.82       | 777 {79}                         | 653 {67}     | 11505 {1174} |     |                                 |                                              |      |                                          |      |             |
|                   | 1200                    |                 |                    | 60              |           | 20              | 1188.34                | 1.26                     | 1.51       | 844 {86}                         | 778 {79}     | 11505 {1174} |     |                                 |                                              |      |                                          |      |             |
|                   | 1500                    |                 |                    | 75              |           | 20              | 1445.72                | 1.04                     | 1.25       | 1146 {117}                       | 962 {98}     | 15131 {1544} |     |                                 |                                              |      | 188                                      | AF3  | 190         |
|                   | 1800                    | EWGM125S        | 28                 | 120             | 125       | 15              | 1809.80                | 0.83                     | 0.99       | 1465 {149}                       | 1232 {126}   | 15131 {1544} | 188 | AF4                             | 190                                          | BF4  |                                          |      |             |
|                   | 2400                    |                 | 28                 | 120             |           | 20              | 2413.06                | 0.62                     | 0.75       | 1853 {189}                       | 1562 {159}   | 21825 {2227} | 188 | AG1                             | 190                                          | BG1  |                                          |      |             |
|                   | 3000                    | 120             |                    | 25              | 3016.33   | 0.50            | 0.60                   | 2240 {229}               | 1888 {193} | 21825 {2227}                     |              |              |     |                                 |                                              |      |                                          |      |             |
|                   | 3600                    | 120             |                    | 30              | 3619.59   | 0.41            | 0.50                   | 2330 {238}               | 1972 {201} | 21825 {2227}                     |              |              |     |                                 |                                              |      |                                          |      |             |
| 0.4               | 100                     | EWJGM63S        | 24                 | 10              | 63        | 10              | 103.13                 | 14.5                     | 17.5       | 199 {20}                         | 167 {17}     | 4155 {424}   | 188 | AB5                             | 190                                          | BB5  |                                          |      |             |
|                   | 150                     | EWJGM70S        | 24                 | 15              | 70        | 10              | 151.25                 | 9.92                     | 11.9       | 287 {29}                         | 241 {25}     | 5674 {579}   | 188 | AC4                             | 190                                          | BC4  |                                          |      |             |
|                   | 200                     | EWGM80S         | 24                 | 20              | 80        | 10              | 193.88                 | 7.74                     | 9.28       | 371 {38}                         | 311 {32}     | 7575 {773}   | 188 | AD4                             | 190                                          | BD4  |                                          |      |             |
|                   | 250                     |                 |                    | 25              |           | 10              | 247.50                 | 6.06                     | 7.27       | 469 {48}                         | 394 {40}     | 7575 {773}   |     |                                 |                                              |      |                                          |      |             |
|                   | 300                     |                 |                    | 20              |           | 15              | 290.82                 | 5.16                     | 6.19       | 470 {48}                         | 432 {44}     | 7575 {773}   |     |                                 |                                              |      |                                          |      |             |
|                   | 400                     | EWGM100S        | 24                 | 20              | 100       | 20              | 387.76                 | 3.87                     | 4.64       | 659 {67}                         | 555 {57}     | 11505 {1174} | 188 | AE5                             | 190                                          | BE5  |                                          |      |             |
|                   | 500                     |                 |                    | 25              |           | 20              | 495.00                 | 3.03                     | 3.64       | 830 {85}                         | 698 {71}     | 11505 {1174} |     |                                 |                                              |      |                                          |      |             |
|                   | 600                     |                 |                    | 60              |           | 10              | 600.00                 | 2.50                     | 3.00       | 1095 {112}                       | 917 {94}     | 15131 {1544} |     |                                 |                                              |      |                                          |      |             |
|                   | 800                     | EWGM125S        | 28                 | 40              | 125       | 20              | 810.38                 | 1.85                     | 2.22       | 1318 {135}                       | 1108 {113}   | 15131 {1544} | 188 | AF6                             | 190                                          | BF6  |                                          |      |             |
|                   | 1000                    |                 |                    | 50              |           | 20              | 1018.18                | 1.47                     | 1.77       | 1572 {160}                       | 1377 {141}   | 15131 {1544} |     |                                 |                                              |      |                                          |      |             |
|                   | 1200                    |                 |                    | 60              |           | 20              | 1200.00                | 1.25                     | 1.50       | 1923 {196}                       | 1616 {165}   | 21825 {2227} |     |                                 |                                              |      | 188                                      | AG3  | 190         |
|                   | 1500                    | EWGM150S        | 75                 | 150             | 20        | 1464.94         | 1.02                   | 1.23                     | 2328 {238} | 1955 {199}                       | 21825 {2227} | 188          | AG4 | 190                             | BG4                                          |      |                                          |      |             |
|                   | 1800                    |                 | 120                |                 | 15        | 1756.70         | 0.85                   | 1.02                     | 2589 {264} | 2422 {247}                       | 21825 {2227} |              |     |                                 |                                              |      |                                          |      |             |
|                   | 2400                    | EWGM175S        | 38                 | 120             | 175       | 20              | 2342.26                | 0.64                     | 0.77       | 3459 {353}                       | 3102 {317}   | 24451 {2495} | 188 | AH2                             | 190                                          | BH2  |                                          |      |             |
|                   | 3000                    |                 |                    | 120             |           | 25              | 2927.83                | 0.51                     | 0.61       | 4259 {435}                       | 3580 {365}   | 29743 {3035} |     |                                 |                                              |      |                                          |      |             |
|                   | 3600                    |                 |                    | 120             |           | 30              | 3513.39                | 0.43                     | 0.51       | 4550 {464}                       | 3832 {391}   | 29743 {3035} |     |                                 |                                              |      |                                          |      |             |

## A Type: Standard Package/Solid Output Shaft [S]

| Motor output (kW) | Nominal Reduction ratio | TERUS Model No. | TERUS combinations |                 |           |                 | Actual reduction ratio | Output shaft speed r/min |              | Allowable torque on output shaft |              |              |              | Allowable radial load on output | Mounting direction T/B/E External dimensions |      | Mounting direction V External dimensions |            |
|-------------------|-------------------------|-----------------|--------------------|-----------------|-----------|-----------------|------------------------|--------------------------|--------------|----------------------------------|--------------|--------------|--------------|---------------------------------|----------------------------------------------|------|------------------------------------------|------------|
|                   |                         |                 | GMTA               |                 | Worm      |                 |                        |                          |              | 50 Hz                            |              | 60 Hz        |              |                                 | N {kgf}                                      | Page | Motor model                              | Page       |
|                   |                         |                 | Frame No.          | Reduction ratio | Frame No. | Reduction ratio |                        | 50 Hz                    | 60 Hz        | N·m {kgf·m}                      | N·m {kgf·m}  |              |              |                                 |                                              |      |                                          |            |
| 0.75              | 100                     | EWGMR80S        | 28                 | 10              | 80        | 10              | 101.59                 | 14.8                     | 17.7         | 374 {38}                         | 314 {32}     | 7575 {773}   | 188          | AD5                             | 190                                          | BD5  |                                          |            |
|                   | 150                     | EWGMR100S       | 28                 | 15              | 100       | 10              | 146.94                 | 10.2                     | 12.2         | 542 {55}                         | 455 {46}     | 11505 {1174} | 188          | AE6                             | 190                                          | BE6  |                                          |            |
|                   | 200                     |                 |                    | 10              |           | 199.48          | 7.52                   | 9.02                     | 727 {74}     | 610 {62}                         | 11505 {1174} |              |              |                                 |                                              |      |                                          |            |
|                   | 250                     |                 |                    | 10              |           | 253.97          | 5.91                   | 7.09                     | 844 {86}     | 769 {79}                         | 11505 {1174} |              |              |                                 |                                              |      |                                          |            |
|                   | 300                     | EWGMR125S       | 28                 | 20              | 125       | 15              | 299.22                 | 5.01                     | 6.02         | 1023 {104}                       | 860 {88}     | 15131 {1544} | 188          | AF7                             | 190                                          | BF7  |                                          |            |
|                   | 400                     |                 |                    | 20              |           | 398.96          | 3.76                   | 4.51                     | 1301 {133}   | 1096 {112}                       | 15131 {1544} |              |              |                                 |                                              |      |                                          |            |
|                   | 500                     |                 |                    | 25              |           | 507.94          | 2.95                   | 3.54                     | 1572 {160}   | 1376 {140}                       | 15131 {1544} |              |              |                                 |                                              |      |                                          |            |
|                   | 600                     | EWGMR150S       | 38                 | 60              | 150       | 10              | 600.82                 | 2.50                     | 3.00         | 2067 {211}                       | 1733 {177}   | 21825 {2227} | 188          | AG6                             | 190                                          | BG6  |                                          |            |
|                   | 800                     |                 |                    | 40              |           | 812.70          | 1.85                   | 2.21                     | 2488 {254}   | 2093 {214}                       | 21825 {2227} |              |              |                                 |                                              |      |                                          |            |
|                   | 1000                    |                 |                    | 50              |           | 982.86          | 1.53                   | 1.83                     | 3019 {308}   | 2539 {259}                       | 24451 {2495} |              |              |                                 |                                              |      |                                          |            |
|                   | 1200                    | EWGMR175S       | 38                 | 60              | 175       | 20              | 1201.64                | 1.25                     | 1.50         | 3459 {353}                       | 3073 {314}   | 24451 {2495} | 188          | AH4                             | 190                                          | BH4  |                                          |            |
|                   | 1500                    | EWGMR200S       | 38                 | 75              | 200       | 20              | 1493.34                | 1.00                     | 1.21         | 4412 {450}                       | 3710 {379}   | 29743 {3035} | 188          | AI2                             | 190                                          | BI2  |                                          |            |
|                   | 1800                    |                 | 42                 | 120             | 200       | 15              | 1837.50                | 0.82                     | 0.98         | 5360 {547}                       | 4498 {459}   | 29743 {3035} | 188          | AI3                             | 190                                          | BI3  |                                          |            |
|                   | 2400                    |                 | TDGMR200S          | 42              | 120       | 200             | 20                     | 2450.00                  | 0.61         | 0.73                             | 8101 {827}   | 6806 {694}   | 32400 {3306} | 188                             | AK1                                          | 190  | BK1                                      |            |
| 3000              | 100                     | 200             |                    |                 | 30        | 3032.82         | 0.49                   | 0.59                     | 9075 {926}   | 7651 {781}                       | 32400 {3306} |              |              |                                 |                                              |      |                                          |            |
| 3600              | 120                     | 200             |                    |                 | 30        | 3858.75         | 0.39                   | 0.47                     | 11143 {1137} | 9586 {978}                       | 32400 {3306} |              |              |                                 |                                              |      |                                          |            |
| 1.5               | 100                     | EWGMR100S       | 38                 | 10              | 100       | 10              | 100.00                 | 15.0                     | 18.0         | 750 {76}                         | 630 {64}     | 11505 {1174} | 188          | AE7                             | 190                                          | BE7  |                                          |            |
|                   | 150                     | EWGMR125S       | 38                 | 15              | 125       | 10              | 150.00                 | 10.0                     | 12.0         | 1113 {114}                       | 935 {95}     | 15131 {1544} | 188          | AF8                             | 190                                          | BF8  |                                          |            |
|                   | 200                     |                 |                    | 20              |           | 10              | 196.15                 | 7.65                     | 9.18         | 1439 {147}                       | 1209 {123}   | 15131 {1544} |              |                                 |                                              |      |                                          |            |
|                   | 250                     |                 |                    | 25              |           | 10              | 240.91                 | 6.23                     | 7.47         | 1572 {160}                       | 1472 {150}   | 15131 {1544} |              |                                 |                                              |      |                                          |            |
|                   | 300                     | EWGMR150S       | 38                 | 30              | 150       | 10              | 300.00                 | 5.00                     | 6.00         | 2180 {222}                       | 1830 {187}   | 21825 {2227} | 188          | AG7                             | 190                                          | BG7  |                                          |            |
|                   | 400                     |                 |                    | 20              |           | 392.30          | 3.82                   | 4.59                     | 2578 {263}   | 2173 {222}                       | 21825 {2227} |              |              |                                 |                                              |      |                                          |            |
|                   | 500                     |                 |                    | 25              |           | 175             | 20                     | 481.82                   | 3.11         | 3.74                             | 3171 {324}   | 2672 {273}   |              |                                 |                                              |      | 24451 {2495}                             |            |
|                   | 600                     | EWGMR200S       | 42                 | 60              | 200       | 10              | 614.92                 | 2.44                     | 2.93         | 4227 {431}                       | 3546 {362}   | 29743 {3035} | 188          | AI5                             | 190                                          | BI5  |                                          |            |
|                   | 800                     |                 |                    | 40              |           | 20              | 785.06                 | 1.91                     | 2.29         | 4802 {490}                       | 4046 {413}   | 29743 {3035} |              |                                 |                                              |      |                                          |            |
|                   | 1000                    |                 |                    | 50              |           | 20              | 974.08                 | 1.54                     | 1.85         | 5805 {592}                       | 4955 {506}   | 29743 {3035} |              |                                 |                                              |      |                                          |            |
|                   | 1200                    | TDGMR200S       | 42                 | 60              | 200       | 20              | 1229.84                | 1.22                     | 1.46         | 8840 {902}                       | 7425 {758}   | 32400 {3306} | 188          | AK3                             | 190                                          | BK3  |                                          |            |
|                   | 1500                    |                 |                    | 75              |           | 20              | 1457.18                | 1.03                     | 1.24         | 10397 {1061}                     | 8733 {891}   | 32400 {3306} |              |                                 |                                              |      |                                          |            |
| 1800              | 60                      |                 |                    | 30              |           | 1937.00         | 0.77                   | 0.93                     | 11143 {1137} | 10603 {1082}                     | 32400 {3306} |              |              |                                 |                                              |      |                                          |            |
| 2.2               | 100                     | EWGMR125S       | 42                 | 10              | 125       | 10              | 98.70                  | 15.2                     | 18.2         | 1094 {112}                       | 920 {93.9}   | 15131 {1544} | 188          | AF9                             | 190                                          | BF9  |                                          |            |
|                   | 150                     |                 |                    | 10              |           | 144.54          | 10.4                   | 12.5                     | 1572 {160}   | 1324 {135}                       | 15131 {1544} |              |              |                                 |                                              |      |                                          |            |
|                   | 200                     | EWGMR150S       | 42                 | 20              | 150       | 10              | 206.59                 | 7.26                     | 8.71         | 2235 {228}                       | 1877 {192}   | 21825 {2227} | 188          | AG8                             | 190                                          | BG8  |                                          |            |
|                   | 250                     |                 |                    | 10              |           | 254.55          | 5.89                   | 7.07                     | 2589 {264}   | 2293 {234}                       | 21825 {2227} |              |              |                                 |                                              |      |                                          |            |
|                   | 300                     |                 |                    | EWGMR175S       |           | 42              | 30                     | 175                      | 10           | 291.43                           | 5.15         | 6.18         |              |                                 |                                              |      | 3137 {320}                               | 2633 {269} |
|                   | 400                     | 20              | 413.18             |                 | 3.63      |                 | 4.36                   |                          | 3459 {353}   | 3393 {346}                       | 24451 {2495} |              |              |                                 |                                              |      |                                          |            |
| 500               | EWGMR200S               | 42              | 25                 | 200             | 20        | 509.10          | 2.95                   | 3.54                     | 4837 {494}   | 4081 {416}                       | 29743 {3035} | 188          | AI6          | 190                             | BI6                                          |      |                                          |            |

### Characteristics

#### A Type: Standard Package/Hollow Output Shaft [H]

| Motor output (kW) | Nominal Reduction ratio | TERUS Model No. | TERUS combinations |                 |           |                 | Actual reduction ratio | Output shaft speed r/min |            | Allowable torque on output shaft |              |              |              | Allowable radial load on output | Mounting direction T/B/E External dimensions |      | Mounting direction V External dimensions |     |
|-------------------|-------------------------|-----------------|--------------------|-----------------|-----------|-----------------|------------------------|--------------------------|------------|----------------------------------|--------------|--------------|--------------|---------------------------------|----------------------------------------------|------|------------------------------------------|-----|
|                   |                         |                 | GMTA               |                 | Worm      |                 |                        |                          |            | 50 Hz                            |              | 60 Hz        |              |                                 |                                              |      |                                          |     |
|                   |                         |                 | Frame No.          | Reduction ratio | Frame No. | Reduction ratio |                        | 50 Hz                    | 60 Hz      | N·m {kgf·m}                      | N·m {kgf·m}  | N {kgf}      | Page         |                                 | Motor model                                  | Page | Motor model                              |     |
| 0.1               | 100                     | SWJGM50H        | 18                 | 10              | 50        | 10              | 97.79                  | 15.3                     | 18.4       | 47 {4.8}                         | 39 {4.0}     | 3305 {337}   | 192          | CA1                             | 194                                          | DA1  |                                          |     |
|                   | 150                     |                 |                    | 15              |           | 10              | 148.00                 | 10.1                     | 12.2       | 70 {7.1}                         | 59 {6.0}     | 3305 {337}   |              |                                 |                                              |      |                                          |     |
|                   | 200                     |                 |                    | 20              |           | 10              | 198.21                 | 7.57                     | 9.08       | 93 {9.5}                         | 78 {7.9}     | 3305 {337}   |              |                                 |                                              |      |                                          |     |
|                   | 250                     |                 |                    | 25              |           | 10              | 248.43                 | 6.04                     | 7.25       | 109 {11}                         | 97 {9.9}     | 3305 {337}   |              |                                 |                                              |      |                                          |     |
|                   | 300                     | SWJGM63H        | 18                 | 30              | 63        | 10              | 294.64                 | 5.09                     | 6.11       | 136 {14}                         | 114 {12}     | 3153 {322}   | 192          | CA5                             | 194                                          | DA5  |                                          |     |
|                   | 400                     |                 |                    | 40              |           | 10              | 401.53                 | 3.74                     | 4.48       | 184 {19}                         | 154 {16}     | 3153 {322}   |              |                                 |                                              |      |                                          |     |
|                   | 500                     |                 |                    | 50              |           | 10              | 498.17                 | 3.01                     | 3.61       | 224 {23}                         | 190 {19}     | 3153 {322}   |              |                                 |                                              |      |                                          |     |
|                   | 600                     |                 |                    | 40              |           | 15              | 602.30                 | 2.49                     | 2.99       | 224 {23}                         | 211 {22}     | 3153 {322}   |              |                                 |                                              |      |                                          |     |
|                   | 800                     | SWJGM70H        | 18                 | 40              | 70        | 20              | 803.06                 | 1.87                     | 2.24       | 315 {32}                         | 265 {27}     | 3591 {366}   | 192          | CB1                             | 194                                          | DB1  |                                          |     |
|                   | 1000                    | SWGM80H         | 18                 | 50              | 80        | 20              | 996.34                 | 1.51                     | 1.81       | 397 {41}                         | 334 {34}     | 8849 {903}   | 192          | CC1                             | 194                                          | DC1  |                                          |     |
|                   | 1200                    | SWGM100H        | 24                 | 120             | 100       | 10              | 1221.60                | 1.23                     | 1.47       | 538 {55}                         | 451 {46}     | 10711 {1093} | 192          | CD2                             | 194                                          | DD2  |                                          |     |
|                   | 1500                    |                 |                    | 100             |           | 15              | 1494.66                | 1.00                     | 1.20       | 607 {62}                         | 511 {52}     | 10711 {1093} |              |                                 |                                              |      |                                          |     |
|                   | 1800                    |                 |                    | 120             |           | 15              | 1832.40                | 0.82                     | 0.98       | 738 {75}                         | 620 {63}     | 10711 {1093} |              |                                 |                                              |      |                                          |     |
|                   | 2400                    |                 |                    | 120             |           | 20              | 2443.20                | 0.61                     | 0.74       | 844 {86}                         | 763 {78}     | 10711 {1093} |              |                                 |                                              |      |                                          |     |
|                   | 3000                    | SWGM125H        | 24                 | 120             | 125       | 25              | 3054.00                | 0.49                     | 0.59       | 1090 {111}                       | 918 {94}     | 18531 {1891} | 192          | CE1                             | 194                                          | DE1  |                                          |     |
|                   | 3600                    |                 |                    | 120             |           | 30              | 3664.80                | 0.41                     | 0.49       | 1162 {119}                       | 982 {100}    | 18531 {1891} |              |                                 |                                              |      |                                          |     |
| 0.2               | 100                     | SWJGM50H        | 18                 | 10              | 50        | 10              | 97.79                  | 15.3                     | 18.4       | 94 {9.6}                         | 79 {8.1}     | 3305 {337}   | 192          | CA3                             | 194                                          | DA3  |                                          |     |
|                   | 150                     | SWJGM63H        | 18                 | 15              | 63        | 10              | 148.00                 | 10.1                     | 12.2       | 141 {14}                         | 118 {12}     | 3153 {322}   | 192          | CA7                             | 194                                          | DA7  |                                          |     |
|                   | 200                     |                 |                    | 20              |           | 10              | 198.21                 | 7.57                     | 9.08       | 186 {19}                         | 156 {16}     | 3153 {322}   |              |                                 |                                              |      |                                          |     |
|                   | 250                     |                 |                    | 25              |           | 10              | 248.43                 | 6.04                     | 7.25       | 224 {23}                         | 194 {20}     | 3153 {322}   |              |                                 |                                              |      |                                          |     |
|                   | 300                     |                 |                    | 20              |           | 15              | 297.32                 | 5.05                     | 6.05       | 224 {23}                         | 215 {22}     | 3153 {322}   |              |                                 |                                              |      |                                          |     |
|                   | 400                     | SWJGM70H        | 18                 | 20              | 70        | 20              | 396.42                 | 3.78                     | 4.54       | 315 {32}                         | 272 {28}     | 3591 {366}   | 192          | CB3                             | 194                                          | DB3  |                                          |     |
|                   | 500                     | SWGM80H         | 18                 | 25              | 80        | 20              | 496.86                 | 3.02                     | 3.62       | 409 {42}                         | 344 {35}     | 8849 {903}   | 192          | CC2                             | 194                                          | DC2  |                                          |     |
|                   | 600                     |                 | 24                 | 40              |           | 15              | 585.45                 | 2.56                     | 3.07       | 470 {48}                         | 421 {43}     | 8849 {903}   | 192          | CC3                             | 194                                          | DC3  |                                          |     |
|                   | 800                     | SWGM100H        | 24                 | 40              | 100       | 20              | 780.60                 | 1.92                     | 2.31       | 639 {65}                         | 537 {55}     | 10711 {1093} | 192          | CD4                             | 194                                          | DD4  |                                          |     |
|                   | 1000                    |                 |                    | 50              |           | 20              | 988.14                 | 1.52                     | 1.82       | 777 {79}                         | 653 {67}     | 10711 {1093} |              |                                 |                                              |      |                                          |     |
|                   | 1200                    |                 |                    | 60              |           | 20              | 1188.34                | 1.26                     | 1.51       | 844 {86}                         | 778 {79}     | 10711 {1093} |              |                                 |                                              |      |                                          |     |
|                   | 1500                    |                 |                    | 75              |           | 20              | 1445.72                | 1.04                     | 1.25       | 1146 {117}                       | 962 {98}     | 18531 {1891} |              |                                 |                                              |      | 192                                      | CE3 |
|                   | 1800                    | SWGM125H        | 24                 | 120             | 125       | 15              | 1809.80                | 0.83                     | 0.99       | 1465 {149}                       | 1232 {126}   | 18531 {1891} | 192          | CE4                             | 194                                          | DE4  |                                          |     |
|                   | 2400                    |                 | 28                 | 120             |           | 150             | 20                     | 2413.06                  | 0.62       | 0.75                             | 1853 {189}   | 1562 {159}   | 15680 {1600} | 192                             | CF1                                          | 194  | DF1                                      |     |
|                   | 3000                    | 120             |                    | 25              | 3016.33   |                 | 0.50                   | 0.60                     | 2240 {229} | 1888 {193}                       | 15680 {1600} |              |              |                                 |                                              |      |                                          |     |
|                   | 3600                    | 120             |                    | 30              | 3619.59   |                 | 0.41                   | 0.50                     | 2330 {238} | 1972 {201}                       | 15680 {1600} |              |              |                                 |                                              |      |                                          |     |
| 0.4               | 100                     | SWJGM63H        | 24                 | 10              | 63        | 10              | 103.13                 | 14.5                     | 17.5       | 199 {20}                         | 167 {17}     | 3153 {322}   | 192          | CB4                             | 194                                          | DB4  |                                          |     |
|                   | 150                     | SWJGM70H        | 24                 | 15              | 70        | 10              | 151.25                 | 9.92                     | 11.9       | 287 {29}                         | 241 {25}     | 3591 {366}   |              |                                 |                                              |      |                                          |     |
|                   | 200                     | SWGM80H         | 24                 | 20              | 80        | 10              | 193.88                 | 7.74                     | 9.28       | 371 {38}                         | 311 {32}     | 8849 {903}   |              |                                 |                                              |      |                                          |     |
|                   | 250                     |                 |                    | 25              |           | 10              | 247.50                 | 6.06                     | 7.27       | 469 {48}                         | 394 {40}     | 8849 {903}   |              |                                 |                                              |      |                                          |     |
|                   | 300                     |                 |                    | 20              |           | 15              | 290.82                 | 5.16                     | 6.19       | 470 {48}                         | 432 {44}     | 8849 {903}   | 192          | CD5                             | 194                                          | DD5  |                                          |     |
|                   | 400                     | SWGM100H        | 24                 | 20              | 100       | 20              | 387.76                 | 3.87                     | 4.64       | 659 {67}                         | 555 {57}     | 10711 {1093} |              |                                 |                                              |      |                                          |     |
|                   | 500                     |                 |                    | 25              |           | 20              | 495.00                 | 3.03                     | 3.64       | 830 {85}                         | 698 {71}     | 10711 {1093} |              |                                 |                                              |      |                                          |     |
|                   | 600                     | SWGM125H        | 28                 | 60              | 125       | 10              | 600.00                 | 2.50                     | 3.00       | 1095 {112}                       | 917 {94}     | 18531 {1891} | 192          | CE6                             | 194                                          | DE6  |                                          |     |
|                   | 800                     |                 |                    | 40              |           | 20              | 810.38                 | 1.85                     | 2.22       | 1318 {135}                       | 1108 {113}   | 18531 {1891} |              |                                 |                                              |      |                                          |     |
|                   | 1000                    |                 |                    | 50              |           | 20              | 1018.18                | 1.47                     | 1.77       | 1572 {160}                       | 1377 {141}   | 18531 {1891} |              |                                 |                                              |      |                                          |     |
|                   | 1200                    |                 |                    | 60              |           | 20              | 1200.00                | 1.25                     | 1.50       | 1923 {196}                       | 1616 {165}   | 15680 {1600} |              |                                 |                                              |      | 192                                      | CF3 |
|                   | 1500                    | SWGM150H        | 75                 | 150             | 20        | 1464.94         | 1.02                   | 1.23                     | 2328 {238} | 1955 {199}                       | 15680 {1600} |              |              |                                 |                                              |      |                                          |     |
|                   | 1800                    |                 | 120                |                 | 15        | 1756.70         | 0.85                   | 1.02                     | 2589 {264} | 2422 {247}                       | 15680 {1600} | 192          | CF4          | 194                             | DF4                                          |      |                                          |     |
|                   | 2400                    | SWGM175H        | 38                 | 120             | 175       | 20              | 2342.26                | 0.64                     | 0.77       | 3459 {353}                       | 3102 {317}   | 26558 {2710} | 192          | CG2                             | 194                                          | DG2  |                                          |     |
|                   | 3000                    | SWGM200H        | 38                 | 120             | 200       | 25              | 2927.83                | 0.51                     | 0.61       | 4259 {435}                       | 3580 {365}   | 29743 {3035} | 192          | CH1                             | 194                                          | DH1  |                                          |     |
|                   | 3600                    |                 |                    | 120             |           | 30              | 3513.39                | 0.43                     | 0.51       | 4550 {464}                       | 3832 {391}   | 29743 {3035} |              |                                 |                                              |      |                                          |     |

## A Type: Standard Package/Hollow Output Shaft [H]

| Motor output (kW) | Nominal Reduction ratio | TERUS Model No. | TERUS combinations |                 |           |                 | Actual reduction ratio | Output shaft speed r/min |              | Allowable torque on output shaft |              |              |              | Allowable radial load on output | Mounting direction T/B/E External dimensions |      | Mounting direction V External dimensions |  |
|-------------------|-------------------------|-----------------|--------------------|-----------------|-----------|-----------------|------------------------|--------------------------|--------------|----------------------------------|--------------|--------------|--------------|---------------------------------|----------------------------------------------|------|------------------------------------------|--|
|                   |                         |                 | GMTA               |                 | Worm      |                 |                        |                          |              | 50 Hz                            |              | 60 Hz        |              |                                 |                                              |      |                                          |  |
|                   |                         |                 | Frame No.          | Reduction ratio | Frame No. | Reduction ratio |                        | 50 Hz                    | 60 Hz        | N·m {kgf·m}                      | N·m {kgf·m}  | N {kgf}      | Page         |                                 | Motor model                                  | Page | Motor model                              |  |
| 0.75              | 100                     | SWGMR80H        | 28                 | 10              | 80        | 10              | 101.59                 | 14.8                     | 17.7         | 374 {38}                         | 314 {32}     | 8849 {903}   | 192          | CC5                             | 194                                          | DC5  |                                          |  |
|                   | 150                     | SWGMR100H       | 28                 | 15              | 100       | 10              | 146.94                 | 10.2                     | 12.2         | 542 {55}                         | 455 {46}     | 10711 {1093} | 192          | CD6                             | 194                                          | DD6  |                                          |  |
|                   | 200                     |                 |                    | 10              |           | 199.48          | 7.52                   | 9.02                     | 727 {74}     | 610 {62}                         | 10711 {1093} |              |              |                                 |                                              |      |                                          |  |
|                   | 250                     |                 |                    | 10              |           | 253.97          | 5.91                   | 7.09                     | 844 {86}     | 769 {79}                         | 10711 {1093} |              |              |                                 |                                              |      |                                          |  |
|                   | 300                     | SWGMR125H       | 28                 | 20              | 125       | 15              | 299.22                 | 5.01                     | 6.02         | 1023 {104}                       | 860 {88}     | 18531 {1891} | 192          | CE7                             | 194                                          | DE7  |                                          |  |
|                   | 400                     |                 |                    | 20              |           | 398.96          | 3.76                   | 4.51                     | 1301 {133}   | 1096 {112}                       | 18531 {1891} |              |              |                                 |                                              |      |                                          |  |
|                   | 500                     |                 |                    | 20              |           | 507.94          | 2.95                   | 3.54                     | 1572 {160}   | 1376 {140}                       | 18531 {1891} |              |              |                                 |                                              |      |                                          |  |
|                   | 600                     | SWGMR150H       | 38                 | 60              | 150       | 10              | 600.82                 | 2.50                     | 3.00         | 2067 {211}                       | 1733 {177}   | 15680 {1600} | 192          | CF6                             | 194                                          | DF6  |                                          |  |
|                   | 800                     |                 |                    | 20              |           | 812.70          | 1.85                   | 2.21                     | 2488 {254}   | 2093 {214}                       | 15680 {1600} |              |              |                                 |                                              |      |                                          |  |
|                   | 1000                    |                 |                    | 20              |           | 982.86          | 1.53                   | 1.83                     | 3019 {308}   | 2539 {259}                       | 19364 {1976} |              |              |                                 |                                              |      |                                          |  |
|                   | 1200                    | SWGMR175H       | 38                 | 60              | 175       | 20              | 1201.64                | 1.25                     | 1.50         | 3459 {353}                       | 3073 {314}   | 19364 {1976} | 192          | CG4                             | 194                                          | DG4  |                                          |  |
|                   | 1500                    | SWGMR200H       | 38                 | 75              | 200       | 20              | 1493.34                | 1.00                     | 1.21         | 4412 {450}                       | 3710 {379}   | 22834 {2330} | 192          | CH2                             | 194                                          | DH2  |                                          |  |
|                   | 1800                    |                 | 42                 | 120             | 200       | 15              | 1837.50                | 0.82                     | 0.98         | 5360 {547}                       | 4498 {459}   | 22834 {2330} | 192          | CH3                             | 194                                          | DH3  |                                          |  |
|                   | 2400                    |                 | TDGMR200H          | 42              | 120       | 200             | 20                     | 2450.00                  | 0.61         | 0.73                             | 8101 {827}   | 6806 {694}   | 38803 {3960} | 192                             | CJ1                                          | 194  | DJ1                                      |  |
|                   | 3000                    | 100             |                    |                 | 200       | 30              | 3032.82                | 0.49                     | 0.59         | 9075 {926}                       | 7651 {781}   | 38803 {3960} |              |                                 |                                              |      |                                          |  |
|                   | 3600                    | 120             |                    |                 | 200       | 30              | 3858.75                | 0.39                     | 0.47         | 11143 {1137}                     | 9586 {978}   | 38803 {3960} |              |                                 |                                              |      |                                          |  |
| 1.5               | 100                     | SWGMR100H       | 38                 | 10              | 100       | 10              | 100.00                 | 15.0                     | 18.0         | 750 {76}                         | 630 {64}     | 10711 {1093} | 192          | CD7                             | 194                                          | DD7  |                                          |  |
|                   | 150                     | SWGMR125H       | 38                 | 15              | 125       | 10              | 150.00                 | 10.0                     | 12.0         | 1113 {114}                       | 935 {95}     | 18531 {1891} | 192          | CE8                             | 194                                          | DE8  |                                          |  |
|                   | 200                     |                 |                    | 10              |           | 196.15          | 7.65                   | 9.18                     | 1439 {147}   | 1209 {123}                       | 18531 {1891} |              |              |                                 |                                              |      |                                          |  |
|                   | 250                     |                 |                    | 10              |           | 240.91          | 6.23                   | 7.47                     | 1572 {160}   | 1472 {150}                       | 18531 {1891} |              |              |                                 |                                              |      |                                          |  |
|                   | 300                     | SWGMR150H       | 38                 | 30              | 150       | 10              | 300.00                 | 5.00                     | 6.00         | 2180 {222}                       | 1830 {187}   | 15680 {1600} | 192          | CF7                             | 194                                          | DF7  |                                          |  |
|                   | 400                     |                 |                    | 20              |           | 392.30          | 3.82                   | 4.59                     | 2578 {263}   | 2173 {222}                       | 15680 {1600} |              |              |                                 |                                              |      |                                          |  |
|                   | 500                     |                 |                    | 25              |           | 175             | 20                     | 481.82                   | 3.11         | 3.74                             | 3171 {324}   | 2672 {273}   |              |                                 |                                              |      | 19364 {1976}                             |  |
|                   | 600                     | SWGMR200H       | 42                 | 60              | 200       | 10              | 614.92                 | 2.44                     | 2.93         | 4227 {431}                       | 3546 {362}   | 22834 {2330} | 192          | CH5                             | 194                                          | DH5  |                                          |  |
|                   | 800                     |                 |                    | 40              |           | 20              | 785.06                 | 1.91                     | 2.29         | 4802 {490}                       | 4046 {413}   | 22834 {2330} |              |                                 |                                              |      |                                          |  |
|                   | 1000                    |                 |                    | 50              |           | 20              | 974.08                 | 1.54                     | 1.85         | 5805 {592}                       | 4955 {506}   | 22834 {2330} |              |                                 |                                              |      |                                          |  |
|                   | 1200                    | TDGMR200H       | 42                 | 60              | 200       | 20              | 1229.84                | 1.22                     | 1.46         | 8840 {902}                       | 7425 {758}   | 38803 {3960} | 192          | CJ3                             | 194                                          | DJ3  |                                          |  |
|                   | 1500                    |                 |                    | 75              |           | 20              | 1457.18                | 1.03                     | 1.24         | 10397 {1061}                     | 8733 {891}   | 38803 {3960} |              |                                 |                                              |      |                                          |  |
| 1800              | 60                      |                 |                    | 30              |           | 1937.00         | 0.77                   | 0.93                     | 11143 {1137} | 10603 {1082}                     | 38803 {3960} |              |              |                                 |                                              |      |                                          |  |
| 2.2               | 100                     | SWGMR125H       | 42                 | 10              | 125       | 10              | 98.70                  | 15.2                     | 18.2         | 1094 {112}                       | 920 {93.9}   | 18531 {1891} | 192          | CE9                             | 194                                          | DE9  |                                          |  |
|                   | 150                     |                 |                    | 10              |           | 144.54          | 10.4                   | 12.5                     | 1572 {160}   | 1324 {135}                       | 18531 {1891} |              |              |                                 |                                              |      |                                          |  |
|                   | 200                     | SWGMR150H       | 42                 | 20              | 150       | 10              | 206.59                 | 7.26                     | 8.71         | 2235 {228}                       | 1877 {192}   | 15680 {1600} | 192          | CE8                             | 194                                          | DF8  |                                          |  |
|                   | 250                     |                 |                    | 10              |           | 254.55          | 5.89                   | 7.07                     | 2589 {264}   | 2293 {234}                       | 15680 {1600} |              |              |                                 |                                              |      |                                          |  |
|                   | 300                     | SWGMR175H       | 42                 | 30              | 175       | 10              | 291.43                 | 5.15                     | 6.18         | 3137 {320}                       | 2633 {269}   | 19364 {1976} | 192          | CG6                             | 194                                          | DG6  |                                          |  |
|                   | 400                     |                 |                    | 20              |           | 413.18          | 3.63                   | 4.36                     | 3459 {353}   | 3393 {346}                       | 19364 {1976} |              |              |                                 |                                              |      |                                          |  |
|                   | 500                     | SWGMR200H       | 42                 | 25              | 200       | 20              | 509.10                 | 2.95                     | 3.54         | 4837 {494}                       | 4081 {416}   | 22834 {2330} | 192          | CH6                             | 194                                          | DH6  |                                          |  |

# Characteristics

## B Type: Self-locking Package/Solid Output Shaft [S]

| Motor output (kW) | Nominal Reduction ratio | TERUS Model No. | TERUS combinations |                 |           |                 | Actual reduction ratio | Output shaft speed r/min |            | Allowable torque on output shaft |              |              |      | Allowable radial load on output | Mounting direction T/B/E External dimensions |     | Mounting direction V External dimensions |  |
|-------------------|-------------------------|-----------------|--------------------|-----------------|-----------|-----------------|------------------------|--------------------------|------------|----------------------------------|--------------|--------------|------|---------------------------------|----------------------------------------------|-----|------------------------------------------|--|
|                   |                         |                 | GMTA               |                 | Worm      |                 |                        |                          |            | 50 Hz                            |              | 60 Hz        |      |                                 |                                              |     |                                          |  |
|                   |                         |                 | Frame No.          | Reduction ratio | Frame No. | Reduction ratio |                        | 50 Hz                    | 60 Hz      | N·m {kgf·m}                      | N·m {kgf·m}  | N {kgf}      | Page | Motor model                     |                                              |     |                                          |  |
| 0.1               | 250                     | EWJGM50S        | 18                 | 5               | 50        | 50              | 251.55                 | 5.96                     | 7.16       | 82 {8.3}                         | 70 {7.1}     | 2558 {261}   | 188  | AA1                             | 190                                          | BA1 |                                          |  |
|                   | 300                     | EWJGM63S        | 18                 | 5               | 63        | 60              | 301.86                 | 4.97                     | 5.96       | 94 {9.6}                         | 81 {8.2}     | 4155 {424}   | 188  | AB1                             | 190                                          | BB1 |                                          |  |
|                   | 500                     |                 |                    | 10              |           | 50              | 488.95                 | 3.07                     | 3.68       | 150 {15}                         | 128 {13}     | 4155 {424}   | 188  | AB2                             | 190                                          | BB2 |                                          |  |
|                   | 600                     |                 |                    | 10              |           | 60              | 586.74                 | 2.56                     | 3.07       | 169 {17}                         | 144 {15}     | 4155 {424}   |      |                                 |                                              |     |                                          |  |
|                   | 750                     | EWJGM70S        | 18                 | 15              | 70        | 50              | 740.00                 | 2.03                     | 2.43       | 220 {22}                         | 186 {19}     | 5674 {579}   | 188  | AC1                             | 190                                          | BC  |                                          |  |
|                   | 1000                    | EWGM80S         | 18                 | 20              | 80        | 50              | 991.05                 | 1.51                     | 1.82       | 298 {30}                         | 252 {26}     | 7575 {773}   | 188  | AD1                             | 190                                          | BD1 |                                          |  |
|                   | 1200                    |                 |                    | 20              |           | 60              | 1189.26                | 1.26                     | 1.51       | 338 {35}                         | 287 {29}     | 7575 {773}   |      |                                 |                                              |     |                                          |  |
|                   | 1500                    | EWGM100S        | 18                 | 30              | 100       | 50              | 1473.20                | 1.02                     | 1.22       | 445 {45}                         | 377 {38}     | 11505 {1174} | 188  | AE1                             | 190                                          | BE1 |                                          |  |
|                   | 1800                    |                 |                    | 30              |           | 60              | 1767.84                | 0.85                     | 1.02       | 504 {51}                         | 427 {44}     | 11505 {1174} |      |                                 |                                              |     |                                          |  |
| 0.2               | 250                     | EWJGM63S        | 18                 | 5               | 63        | 50              | 251.55                 | 5.96                     | 7.16       | 167 {17}                         | 142 {15}     | 4155 {424}   | 188  | AB3                             | 190                                          | BB3 |                                          |  |
|                   | 300                     | EWJGM70S        | 18                 | 5               | 70        | 60              | 301.86                 | 4.97                     | 5.96       | 191 {19}                         | 163 {17}     | 5674 {579}   | 188  | AC2                             | 190                                          | BC2 |                                          |  |
|                   | 500                     | EWGM80S         | 18                 | 10              | 80        | 50              | 488.95                 | 3.07                     | 3.68       | 315 {32}                         | 268 {27}     | 7575 {773}   | 188  | AD2                             | 190                                          | BD2 |                                          |  |
|                   | 600                     |                 |                    | 10              |           | 60              | 586.74                 | 2.56                     | 3.07       | 358 {37}                         | 305 {31}     | 7575 {773}   |      |                                 |                                              |     |                                          |  |
|                   | 750                     | EWGM100S        | 18                 | 15              | 100       | 50              | 740.00                 | 2.03                     | 2.43       | 475 {48}                         | 403 {41}     | 11505 {1174} | 188  | AE3                             | 190                                          | BE3 |                                          |  |
|                   | 1000                    |                 |                    | 20              |           | 50              | 991.05                 | 1.51                     | 1.82       | 619 {63}                         | 525 {54}     | 11505 {1174} |      |                                 |                                              |     |                                          |  |
|                   | 1200                    | EWGM125S        | 18                 | 20              | 125       | 60              | 1189.26                | 1.26                     | 1.51       | 705 {72}                         | 599 {61}     | 15131 {1544} | 188  | AF3                             | 190                                          | BF3 |                                          |  |
|                   | 1500                    |                 | 24                 | 30              | 125       | 50              | 1473.20                | 1.02                     | 1.22       | 900 {92}                         | 762 {78}     | 15131 {1544} | 188  | AF4                             | 190                                          | BF4 |                                          |  |
|                   | 1800                    |                 |                    | 30              |           | 60              | 1767.84                | 0.85                     | 1.02       | 1009 {103}                       | 856 {87}     | 15131 {1544} |      |                                 |                                              |     |                                          |  |
| 0.4               | 250                     | EWGM80S         | 24                 | 5               | 80        | 50              | 247.50                 | 6.06                     | 7.27       | 345 {35}                         | 294 {30}     | 7575 {773}   | 188  | AD4                             | 190                                          | BD4 |                                          |  |
|                   | 300                     | EWGM100S        | 24                 | 5               | 100       | 60              | 297.00                 | 5.05                     | 6.06       | 410 {42}                         | 351 {36}     | 11505 {1174} | 188  | AE5                             | 190                                          | BE5 |                                          |  |
|                   | 500                     |                 |                    | 10              |           | 50              | 515.65                 | 2.91                     | 3.49       | 687 {70}                         | 585 {60}     | 11505 {1174} |      |                                 |                                              |     |                                          |  |
|                   | 600                     | EWGM125S        | 24                 | 10              | 125       | 60              | 618.78                 | 2.42                     | 2.91       | 790 {81}                         | 674 {69}     | 15131 {1544} | 188  | AF5                             | 190                                          | BF5 |                                          |  |
|                   | 750                     |                 |                    | 15              |           | 50              | 756.25                 | 1.98                     | 2.38       | 985 {100}                        | 837 {85}     | 15131 {1544} |      |                                 |                                              |     |                                          |  |
|                   | 1000                    | EWGM150S        | 24                 | 20              | 150       | 50              | 969.40                 | 1.55                     | 1.86       | 1231 {126}                       | 1045 {107}   | 15131 {1544} | 188  | AG2                             | 190                                          | BG2 |                                          |  |
|                   | 1200                    |                 |                    | 20              |           | 60              | 1163.28                | 1.29                     | 1.55       | 1433 {146}                       | 1218 {124}   | 21825 {2227} |      |                                 |                                              |     |                                          |  |
|                   | 1500                    |                 | 28                 | 30              | 50        | 1543.75         | 0.97                   | 1.17                     | 1982 {202} | 1678 {171}                       | 21825 {2227} | 188          | AG3  | 190                             | BG3                                          |     |                                          |  |
|                   | 1800                    | EWGM175S        | 28                 | 30              | 175       | 60              | 1852.50                | 0.81                     | 0.97       | 2231 {228}                       | 1892 {193}   | 24451 {2495} | 188  | AH1                             | 190                                          | BH1 |                                          |  |
| 0.75              | 250                     | EWGMR125S       | 28                 | 5               | 125       | 50              | 253.05                 | 5.93                     | 7.11       | 704 {72}                         | 601 {61}     | 15131 {1544} | 188  | AF7                             | 190                                          | BF7 |                                          |  |
|                   | 300                     |                 |                    | 5               |           | 60              | 303.66                 | 4.94                     | 5.93       | 799 {82}                         | 683 {70}     | 15131 {1544} |      |                                 |                                              |     |                                          |  |
|                   | 500                     |                 |                    | 10              |           | 50              | 507.95                 | 2.95                     | 3.54       | 1296 {132}                       | 1104 {113}   | 15131 {1544} |      |                                 |                                              |     |                                          |  |
|                   | 600                     | EWGMR150S       | 28                 | 10              | 150       | 60              | 609.54                 | 2.46                     | 2.95       | 1517 {155}                       | 1294 {132}   | 21825 {2227} | 188  | AG5                             | 190                                          | BG5 |                                          |  |
|                   | 750                     |                 |                    | 15              |           | 50              | 734.70                 | 2.04                     | 2.45       | 1896 {193}                       | 1610 {164}   | 21825 {2227} |      |                                 |                                              |     |                                          |  |
|                   | 1000                    | EWGMR175S       | 28                 | 20              | 175       | 50              | 997.40                 | 1.50                     | 1.80       | 2478 {253}                       | 2105 {215}   | 24451 {2495} | 188  | AH3                             | 190                                          | BH3 |                                          |  |
|                   | 1200                    |                 |                    | 20              |           | 60              | 1196.88                | 1.25                     | 1.50       | 2824 {288}                       | 2401 {245}   | 24451 {2495} |      |                                 |                                              |     |                                          |  |
|                   | 1500                    | EWGMR200S       | 38                 | 30              | 200       | 50              | 1519.05                | 0.99                     | 1.18       | 3520 {359}                       | 2991 {305}   | 29743 {3035} | 188  | AI2                             | 190                                          | BI2 |                                          |  |
|                   | 1800                    |                 |                    | 30              |           | 60              | 1822.86                | 0.82                     | 0.99       | 3911 {399}                       | 3327 {340}   | 29743 {3035} |      |                                 |                                              |     |                                          |  |
| 1.5               | 250                     | EWGMR150S       | 38                 | 5               | 150       | 50              | 250.00                 | 6.00                     | 7.20       | 1462 {149}                       | 1246 {127}   | 21825 {2227} | 188  | AG7                             | 190                                          | BG7 |                                          |  |
|                   | 300                     |                 |                    | 5               |           | 60              | 300.00                 | 5.00                     | 6.00       | 1641 {167}                       | 1403 {143}   | 21825 {2227} |      |                                 |                                              |     |                                          |  |
|                   | 500                     | EWGMR175S       | 38                 | 10              | 175       | 50              | 500.00                 | 3.00                     | 3.60       | 2687 {274}                       | 2290 {234}   | 24451 {2495} | 188  | AH5                             | 190                                          | BH5 |                                          |  |
|                   | 600                     |                 |                    | 10              |           | 60              | 600.00                 | 2.50                     | 3.00       | 2972 {303}                       | 2545 {260}   | 29743 {3035} |      |                                 |                                              |     |                                          |  |
|                   | 750                     | EWGMR200S       | 38                 | 15              | 200       | 50              | 750.00                 | 2.00                     | 2.40       | 3769 {385}                       | 3215 {328}   | 29743 {3035} | 188  | AI4                             | 190                                          | BI4 |                                          |  |
|                   | 1000                    |                 |                    | 20              |           | 50              | 980.75                 | 1.53                     | 1.84       | 4771 {487}                       | 4064 {415}   | 29743 {3035} |      |                                 |                                              |     |                                          |  |
|                   | 1200                    | TDGMR200S       | 38                 | 20              | 200       | 60              | 1235.75                | 1.21                     | 1.46       | 7411 {756}                       | 6278 {641}   | 32400 {3306} | 188  | AK2                             | 190                                          | BK2 |                                          |  |
|                   | 1800                    | TDGMR225S       | 38                 | 30              | 225       | 60              | 1800.00                | 0.83                     | 1.00       | 10870 {1109}                     | 9205 {939}   | 37000 {3776} | 188  | AL1                             | 190                                          | BL1 |                                          |  |
| 2.2               | 250                     | EWGMR175S       | 42                 | 5               | 175       | 50              | 250.00                 | 6.00                     | 7.20       | 2154 {220}                       | 1839 {188}   | 24451 {2495} | 188  | AH6                             | 190                                          | BH6 |                                          |  |
|                   | 300                     |                 |                    | 5               |           | 60              | 300.00                 | 5.00                     | 6.00       | 2473 {252}                       | 2115 {216}   | 24451 {2495} |      |                                 |                                              |     |                                          |  |
|                   | 500                     | EWGMR200S       | 42                 | 10              | 200       | 50              | 493.50                 | 3.04                     | 3.65       | 3841 {392}                       | 3282 {335}   | 29743 {3035} | 188  | AI6                             | 190                                          | BI6 |                                          |  |
|                   | 600                     |                 |                    | 10              |           | 60              | 592.20                 | 2.53                     | 3.04       | 4311 {440}                       | 3691 {377}   | 29743 {3035} |      |                                 |                                              |     |                                          |  |
|                   | 1200                    | TDGMR225S       | 42                 | 20              | 225       | 60              | 1239.54                | 1.21                     | 1.45       | 11340 {1157}                     | 9594 {979}   | 37000 {3776} | 188  | AL3                             | 190                                          | BL3 |                                          |  |
|                   | 1800                    |                 |                    | 30              |           | 60              | 1748.58                | 0.86                     | 1.03       | 15527 {1584}                     | 13148 {1342} | 37000 {3776} |      |                                 |                                              |     |                                          |  |

## B Type: Self-locking Package/Hollow Output Shaft [H]

| Motor output (kW) | Nominal Reduction ratio | TERUS Model No. | TERUS combinations |                 |           |                 | Actual reduction ratio | Output shaft speed r/min |            | Allowable torque on output shaft |              |              |      | Allowable radial load on output | Mounting direction T/B/E |      | Mounting direction V |  |
|-------------------|-------------------------|-----------------|--------------------|-----------------|-----------|-----------------|------------------------|--------------------------|------------|----------------------------------|--------------|--------------|------|---------------------------------|--------------------------|------|----------------------|--|
|                   |                         |                 | GMTA               |                 | Worm      |                 |                        |                          |            | 50 Hz                            |              | 60 Hz        |      |                                 | External dimensions      |      | External dimensions  |  |
|                   |                         |                 | Frame No.          | Reduction ratio | Frame No. | Reduction ratio |                        | 50 Hz                    | 60 Hz      | N·m {kgf·m}                      | N·m {kgf·m}  | N {kgf}      | Page |                                 | Motor model              | Page | Motor model          |  |
| 0.1               | 250                     | SWJGM50H        | 18                 | 5               | 50        | 50              | 251.55                 | 5.96                     | 7.16       | 82 {8.3}                         | 70 {7.1}     | 5262 {537}   | 192  | CA2                             | 194                      | DA2  |                      |  |
|                   | 300                     | SWJGM63H        | 18                 | 5               | 63        | 60              | 301.86                 | 4.97                     | 5.96       | 94 {9.6}                         | 81 {8.2}     | 7066 {721}   | 192  | CA6                             | 194                      | DA6  |                      |  |
|                   | 500                     |                 |                    | 10              |           | 50              | 488.95                 | 3.07                     | 3.68       | 150 {15}                         | 128 {13}     | 5404 {551}   | 192  | CA5                             | 194                      | DA5  |                      |  |
|                   | 600                     |                 |                    | 10              |           | 60              | 586.74                 | 2.56                     | 3.07       | 169 {17}                         | 144 {15}     | 7066 {721}   |      |                                 |                          |      |                      |  |
|                   | 750                     | SWJGM70H        | 18                 | 15              | 70        | 50              | 740.00                 | 2.03                     | 2.43       | 220 {22}                         | 186 {19}     | 6103 {623}   | 192  | CB1                             | 194                      | DB1  |                      |  |
|                   | 1000                    | SWGM80H         | 18                 | 20              | 80        | 50              | 991.05                 | 1.51                     | 1.82       | 298 {30}                         | 252 {26}     | 8849 {903}   | 192  | CC1                             | 194                      | DC1  |                      |  |
|                   | 1200                    |                 |                    | 20              |           | 60              | 1189.26                | 1.26                     | 1.51       | 338 {35}                         | 287 {29}     | 8849 {903}   |      |                                 |                          |      |                      |  |
|                   | 1500                    | SWGM100H        | 18                 | 30              | 100       | 50              | 1473.20                | 1.02                     | 1.22       | 445 {45}                         | 377 {38}     | 10711 {1093} | 192  | CD1                             | 194                      | DD1  |                      |  |
|                   | 1800                    |                 |                    | 30              |           | 60              | 1767.84                | 0.85                     | 1.02       | 504 {51}                         | 427 {44}     | 10711 {1093} |      |                                 |                          |      |                      |  |
| 0.2               | 250                     | SWJGM63H        | 18                 | 5               | 63        | 50              | 251.55                 | 5.96                     | 7.16       | 167 {17}                         | 142 {15}     | 5404 {551}   | 192  | CA8                             | 194                      | DA8  |                      |  |
|                   | 300                     | SWJGM70H        | 18                 | 5               | 70        | 60              | 301.86                 | 4.97                     | 5.96       | 191 {19}                         | 163 {17}     | 8385 {866}   | 192  | CB2                             | 194                      | CB2  |                      |  |
|                   | 500                     | SWGM80H         | 18                 | 10              | 80        | 50              | 488.95                 | 3.07                     | 3.68       | 315 {32}                         | 268 {27}     | 8849 {903}   | 192  | CC2                             | 194                      | DC2  |                      |  |
|                   | 600                     |                 |                    | 10              |           | 60              | 586.74                 | 2.56                     | 3.07       | 358 {37}                         | 305 {31}     | 8849 {903}   |      |                                 |                          |      |                      |  |
|                   | 750                     | SWGM100H        | 18                 | 15              | 100       | 50              | 740.00                 | 2.03                     | 2.43       | 475 {48}                         | 403 {41}     | 10711 {1093} | 192  | CD3                             | 194                      | DD3  |                      |  |
|                   | 1000                    |                 |                    | 20              |           | 50              | 991.05                 | 1.51                     | 1.82       | 619 {63}                         | 525 {54}     | 10711 {1093} |      |                                 |                          |      |                      |  |
|                   | 1200                    | SWGM125H        | 18                 | 20              | 125       | 60              | 1189.26                | 1.26                     | 1.51       | 705 {72}                         | 599 {61}     | 18531 {1891} | 192  | CE2                             | 194                      | DE2  |                      |  |
|                   | 1500                    |                 | 24                 | 30              |           | 50              | 1473.20                | 1.02                     | 1.22       | 900 {92}                         | 762 {78}     | 18531 {1891} | 192  | CE3                             | 194                      | DE3  |                      |  |
|                   | 1800                    |                 |                    | 30              |           | 60              | 1767.84                | 0.85                     | 1.02       | 1009 {103}                       | 856 {87}     | 18531 {1891} |      |                                 |                          |      |                      |  |
| 0.4               | 250                     | SWGM80H         | 24                 | 5               | 80        | 50              | 247.50                 | 6.06                     | 7.27       | 345 {35}                         | 294 {30}     | 8849 {903}   | 192  | CC4                             | 194                      | DC4  |                      |  |
|                   | 300                     | SWGM100H        | 24                 | 5               | 100       | 60              | 297.00                 | 5.05                     | 6.06       | 410 {42}                         | 351 {36}     | 10711 {1093} | 192  | CD5                             | 194                      | DD5  |                      |  |
|                   | 500                     |                 |                    | 10              |           | 50              | 515.65                 | 2.91                     | 3.49       | 687 {70}                         | 585 {60}     | 10711 {1093} |      |                                 |                          |      |                      |  |
|                   | 600                     | SWGM125H        | 24                 | 10              | 125       | 60              | 618.78                 | 2.42                     | 2.91       | 790 {81}                         | 674 {69}     | 18531 {1891} | 192  | CE5                             | 194                      | DE5  |                      |  |
|                   | 750                     |                 |                    | 15              |           | 50              | 756.25                 | 1.98                     | 2.38       | 985 {100}                        | 837 {85}     | 18531 {1891} |      |                                 |                          |      |                      |  |
|                   | 1000                    |                 |                    | 20              |           | 50              | 969.40                 | 1.55                     | 1.86       | 1231 {126}                       | 1045 {107}   | 18531 {1891} |      |                                 |                          |      |                      |  |
|                   | 1200                    | SWGM150H        | 24                 | 20              | 150       | 60              | 1163.28                | 1.29                     | 1.55       | 1433 {146}                       | 1218 {124}   | 15680 {1600} | 192  | CF2                             | 194                      | DF2  |                      |  |
|                   | 1500                    |                 | 28                 | 30              |           | 50              | 1543.75                | 0.97                     | 1.17       | 1982 {202}                       | 1678 {171}   | 15680 {1600} | 192  | CF3                             | 194                      | DF3  |                      |  |
|                   | 1800                    |                 | 30                 | 60              |           | 1852.50         | 0.81                   | 0.97                     | 2231 {228} | 1892 {193}                       | 19364 {1976} | 192          | CG1  | 194                             | DG1                      |      |                      |  |
| 0.75              | 250                     | SWGMR125H       | 28                 | 5               | 125       | 50              | 253.05                 | 5.93                     | 7.11       | 704 {72}                         | 601 {61}     | 18513 {1891} | 192  | CE7                             | 194                      | DE7  |                      |  |
|                   | 300                     |                 |                    | 5               |           | 60              | 303.66                 | 4.94                     | 5.93       | 799 {82}                         | 683 {70}     | 18513 {1891} |      |                                 |                          |      |                      |  |
|                   | 500                     |                 |                    | 10              |           | 50              | 507.95                 | 2.95                     | 3.54       | 1296 {132}                       | 1104 {113}   | 18513 {1891} |      |                                 |                          |      |                      |  |
|                   | 600                     | SWGMR150H       | 28                 | 10              | 150       | 60              | 609.54                 | 2.46                     | 2.95       | 1517 {155}                       | 1294 {132}   | 15680 {1600} | 192  | CF5                             | 194                      | DF5  |                      |  |
|                   | 750                     |                 |                    | 15              |           | 50              | 734.70                 | 2.04                     | 2.45       | 1896 {193}                       | 1610 {164}   | 15680 {1600} |      |                                 |                          |      |                      |  |
|                   | 1000                    | SWGMR175H       | 28                 | 20              | 175       | 50              | 997.40                 | 1.50                     | 1.80       | 2478 {253}                       | 2105 {215}   | 19364 {1976} | 192  | CG3                             | 194                      | DG3  |                      |  |
|                   | 1200                    |                 |                    | 20              |           | 60              | 1196.88                | 1.25                     | 1.50       | 2824 {288}                       | 2401 {245}   | 19364 {1976} |      |                                 |                          |      |                      |  |
|                   | 1500                    | SWGMR200H       | 38                 | 30              | 200       | 50              | 1519.05                | 0.99                     | 1.18       | 3520 {359}                       | 2991 {305}   | 22834 {2330} | 192  | CH2                             | 194                      | DH2  |                      |  |
|                   | 1800                    |                 |                    | 30              |           | 60              | 1822.86                | 0.82                     | 0.99       | 3911 {399}                       | 3327 {340}   | 22834 {2330} |      |                                 |                          |      |                      |  |
| 1.5               | 250                     | SWGMR150H       | 38                 | 5               | 150       | 50              | 250.00                 | 6.00                     | 7.20       | 1462 {149}                       | 1246 {127}   | 15680 {1600} | 192  | CF7                             | 194                      | DF7  |                      |  |
|                   | 300                     |                 |                    | 5               |           | 60              | 300.00                 | 5.00                     | 6.00       | 1641 {167}                       | 1403 {143}   | 15680 {1600} |      |                                 |                          |      |                      |  |
|                   | 500                     | SWGMR175H       | 38                 | 10              | 175       | 50              | 500.00                 | 3.00                     | 3.60       | 2687 {274}                       | 2290 {234}   | 19364 {1976} | 192  | CG5                             | 194                      | DG5  |                      |  |
|                   | 600                     |                 |                    | 10              |           | 60              | 600.00                 | 2.50                     | 3.00       | 2972 {303}                       | 2545 {260}   | 22834 {2330} |      |                                 |                          |      |                      |  |
|                   | 750                     | SWGMR200H       | 38                 | 15              | 200       | 50              | 750.00                 | 2.00                     | 2.40       | 3769 {385}                       | 3215 {328}   | 22834 {2330} | 192  | CH4                             | 194                      | DH4  |                      |  |
|                   | 1000                    |                 |                    | 20              |           | 50              | 980.75                 | 1.53                     | 1.84       | 4771 {487}                       | 4064 {415}   | 22834 {2330} |      |                                 |                          |      |                      |  |
|                   | 1200                    | TDGMR200H       | 38                 | 20              | 200       | 60              | 1235.75                | 1.21                     | 1.46       | 7411 {756}                       | 6278 {641}   | 38803 {3960} | 192  | CJ2                             | 194                      | DJ2  |                      |  |
|                   | 1800                    |                 |                    | 30              |           | 60              | 1800.00                | 0.83                     | 1.00       | 10870 {1109}                     | 9205 {939}   | 45821 {4676} |      |                                 |                          |      |                      |  |
| 2.2               | 250                     | SWGMR175H       | 42                 | 5               | 175       | 50              | 250.00                 | 6.00                     | 7.20       | 2154 {220}                       | 1839 {188}   | 19364 {1976} | 192  | CG6                             | 194                      | DG6  |                      |  |
|                   | 300                     |                 |                    | 5               |           | 60              | 300.00                 | 5.00                     | 6.00       | 2473 {252}                       | 2115 {216}   | 19364 {1976} |      |                                 |                          |      |                      |  |
|                   | 500                     | SWGMR200H       | 42                 | 10              | 200       | 50              | 493.50                 | 3.04                     | 3.65       | 3841 {392}                       | 3282 {335}   | 22834 {2330} | 192  | CH6                             | 194                      | DH6  |                      |  |
|                   | 600                     |                 |                    | 10              |           | 60              | 592.20                 | 2.53                     | 3.04       | 4311 {440}                       | 3691 {377}   | 22834 {2330} |      |                                 |                          |      |                      |  |
|                   | 1200                    | TDGMR225H       | 42                 | 20              | 225       | 60              | 1239.54                | 1.21                     | 1.45       | 11340 {1157}                     | 9594 {979}   | 45821 {4676} | 192  | CK3                             | 194                      | DK3  |                      |  |
|                   | 1800                    |                 |                    | 30              |           | 60              | 1748.58                | 0.86                     | 1.03       | 15527 {1584}                     | 13148 {1342} | 45821 {4676} |      |                                 |                          |      |                      |  |

### Characteristics

#### C Type: Tough Package/Solid Output Shaft [S]

| Motor output (kW) | Nominal Reduction ratio | TERUS Model No. | TERUS combinations |                 |           |                 | Actual reduction ratio | Output shaft speed r/min |       | Allowable torque on output shaft |             |              |              | Allowable radial load on output | Mounting direction T/B/E External dimensions |      | Mounting direction V External dimensions |  |
|-------------------|-------------------------|-----------------|--------------------|-----------------|-----------|-----------------|------------------------|--------------------------|-------|----------------------------------|-------------|--------------|--------------|---------------------------------|----------------------------------------------|------|------------------------------------------|--|
|                   |                         |                 | GMTA               |                 | Worm      |                 |                        |                          |       | 50 Hz                            |             | 60 Hz        |              |                                 |                                              |      |                                          |  |
|                   |                         |                 | Frame No.          | Reduction ratio | Frame No. | Reduction ratio |                        | 50 Hz                    | 60 Hz | N·m {kgf·m}                      | N·m {kgf·m} | N {kgf}      | Page         |                                 | Motor model                                  | Page | Motor model                              |  |
| 0.1               | 200                     | EWJGM50S        | 18                 | 20              | 50        | 10              | 198.21                 | 7.57                     | 9.08  | 93 {9.5}                         | 78 {7.9}    | 2558 {261}   | 188          | AA2                             | 190                                          | BA2  |                                          |  |
|                   | 300                     | EWJGM63S        | 18                 | 30              | 63        | 10              | 294.64                 | 5.09                     | 6.11  | 136 {14}                         | 114 {12}    | 4155 {424}   | 188          | AB2                             | 190                                          | BB2  |                                          |  |
|                   | 400                     |                 |                    | 40              |           | 10              | 401.53                 | 3.74                     | 4.48  | 184 {19}                         | 154 {16}    | 4155 {424}   |              |                                 |                                              |      |                                          |  |
|                   | 500                     | EWJGM70S        | 18                 | 50              | 70        | 10              | 498.17                 | 3.01                     | 3.61  | 227 {23}                         | 190 {19}    | 5674 {579}   | 188          | AC1                             | 190                                          | BC1  |                                          |  |
|                   | 600                     |                 |                    | 40              |           | 15              | 602.30                 | 2.49                     | 2.99  | 251 {26}                         | 211 {22}    | 5674 {579}   |              |                                 |                                              |      |                                          |  |
|                   | 800                     | EWGM80S         | 18                 | 40              | 80        | 20              | 803.06                 | 1.87                     | 2.24  | 323 {33}                         | 272 {28}    | 7575 {773}   | 188          | AD1                             | 190                                          | BD1  |                                          |  |
|                   | 1000                    |                 |                    | 50              |           | 20              | 996.34                 | 1.51                     | 1.81  | 397 {41}                         | 334 {34}    | 7575 {773}   |              |                                 |                                              |      |                                          |  |
|                   |                         | 1200            | EWGM100S           | 24              | 120       | 100             | 10                     | 1221.60                  | 1.23  | 1.47                             | 538 {55}    | 451 {46}     | 11505 {1174} | 188                             | AE2                                          | 190  | BE2                                      |  |
| 0.2               | 200                     | EWJGM63S        | 18                 | 20              | 63        | 10              | 198.21                 | 7.57                     | 9.08  | 186 {19}                         | 156 {16}    | 4155 {424}   | 188          | AB4                             | 190                                          | BB4  |                                          |  |
|                   | 300                     | EWJGM70S        | 18                 | 20              | 70        | 15              | 297.32                 | 5.05                     | 6.05  | 256 {26}                         | 215 {22}    | 5674 {579}   | 188          | AC3                             | 190                                          | BC3  |                                          |  |
|                   | 400                     | EWGM80S         | 18                 | 20              | 80        | 20              | 396.42                 | 3.78                     | 4.54  | 330 {34}                         | 278 {28}    | 7575 {773}   | 188          | AD2                             | 190                                          | BD2  |                                          |  |
|                   | 500                     |                 |                    | 25              |           | 20              | 496.86                 | 3.02                     | 3.62  | 409 {42}                         | 344 {35}    | 7575 {773}   |              |                                 |                                              |      |                                          |  |
|                   | 600                     | EWGM100S        | 24                 | 40              | 100       | 15              | 585.45                 | 2.56                     | 3.07  | 514 {52}                         | 432 {44}    | 11505 {1174} | 188          | AE4                             | 190                                          | BE4  |                                          |  |
|                   | 800                     |                 |                    | 40              |           | 20              | 780.60                 | 1.92                     | 2.31  | 639 {65}                         | 537 {55}    | 11505 {1174} |              |                                 |                                              |      |                                          |  |
|                   | 1000                    |                 |                    | 50              |           | 20              | 988.14                 | 1.52                     | 1.82  | 777 {79}                         | 653 {67}    | 11505 {1174} |              |                                 |                                              |      |                                          |  |
|                   |                         | 1200            | EWGM125S           | 24              | 60        | 125             | 20                     | 1188.34                  | 1.26  | 1.51                             | 950 {97}    | 798 {81}     | 15131 {1544} | 188                             | AF3                                          | 190  | BF3                                      |  |
| 0.4               | 200                     | EWGM80          | 24                 | 20              | 80        | 10              | 193.88                 | 7.74                     | 9.28  | 371 {38}                         | 311 {32}    | 7575 {773}   | 188          | AD4                             | 190                                          | BD4  |                                          |  |
|                   | 300                     | EWGM100S        | 24                 | 20              | 100       | 15              | 290.82                 | 5.16                     | 6.19  | 527 {54}                         | 443 {45}    | 11505 {1174} | 188          | AE5                             | 190                                          | BE5  |                                          |  |
|                   | 400                     |                 |                    | 20              |           | 20              | 387.76                 | 3.87                     | 4.64  | 659 {67}                         | 555 {57}    | 11505 {1174} |              |                                 |                                              |      |                                          |  |
|                   | 500                     | EWGM125S        | 24                 | 25              | 125       | 20              | 495.00                 | 3.03                     | 3.64  | 851 {87}                         | 716 {73}    | 15131 {1544} | 188          | AF5                             | 190                                          | BF5  |                                          |  |
|                   | 600                     |                 |                    | 60              |           | 10              | 600.00                 | 2.50                     | 3.00  | 1095 {112}                       | 917 {94}    | 15131 {1544} |              |                                 |                                              |      |                                          |  |
|                   | 800                     |                 |                    | 40              |           | 20              | 810.38                 | 1.85                     | 2.22  | 1318 {135}                       | 1108 {113}  | 15131 {1544} |              |                                 |                                              |      |                                          |  |
|                   | 1000                    | EWGM150S        | 28                 | 50              | 150       | 20              | 1018.18                | 1.47                     | 1.77  | 1644 {168}                       | 1382 {141}  | 21825 {2227} | 188          | AG3                             | 190                                          | BG3  |                                          |  |
|                   | 1200                    |                 |                    | 60              |           | 20              | 1200.00                | 1.25                     | 1.50  | 1923 {196}                       | 1616 {165}  | 21825 {2227} |              |                                 |                                              |      |                                          |  |
| 0.75              | 200                     | EWGMR100S       | 28                 | 20              | 100       | 10              | 199.48                 | 7.52                     | 9.02  | 727 {74}                         | 610 {62}    | 11505 {1174} | 188          | AE6                             | 190                                          | BE6  |                                          |  |
|                   | 300                     | EWGMR125S       | 28                 | 20              | 125       | 15              | 299.22                 | 5.01                     | 6.02  | 1023 {104}                       | 860 {88}    | 15131 {1544} | 188          | AF7                             | 190                                          | BF7  |                                          |  |
|                   | 400                     |                 |                    | 20              |           | 20              | 398.96                 | 3.76                     | 4.51  | 1301 {133}                       | 1096 {112}  | 15131 {1544} |              |                                 |                                              |      |                                          |  |
|                   | 500                     | EWGMR150S       | 28                 | 25              | 150       | 20              | 507.94                 | 2.95                     | 3.54  | 1644 {168}                       | 1385 {141}  | 21825 {2227} | 188          | AG5                             | 190                                          | BG5  |                                          |  |
|                   | 600                     |                 |                    | 30              |           | 20              | 607.62                 | 2.47                     | 2.96  | 1947 {199}                       | 1639 {167}  | 21825 {2227} |              |                                 |                                              |      |                                          |  |
|                   | 800                     |                 |                    | 20              |           | 40              | 797.92                 | 1.88                     | 2.26  | 2091 {213}                       | 1773 {181}  | 21825 {2227} |              |                                 |                                              |      |                                          |  |
|                   | 1000                    | EWGMR175S       | 28                 | 25              | 175       | 40              | 1015.88                | 1.48                     | 1.77  | 2661 {271}                       | 2255 {230}  | 24451 {2495} | 188          | AH3                             | 190                                          | BH3  |                                          |  |
|                   | 1200                    |                 |                    | 30              |           | 40              | 1215.24                | 1.23                     | 1.48  | 3133 {320}                       | 2653 {271}  | 24451 {2495} |              |                                 |                                              |      |                                          |  |
| 1.5               | 200                     | EWGMR150S       | 38                 | 20              | 150       | 10              | 196.15                 | 7.65                     | 9.18  | 1450 {148}                       | 1218 {124}  | 21825 {2227} | 188          | AG7                             | 190                                          | BG7  |                                          |  |
|                   | 300                     |                 |                    | 30              |           | 10              | 300.00                 | 5.00                     | 6.00  | 2180 {222}                       | 1830 {187}  | 21825 {2227} |              |                                 |                                              |      |                                          |  |
|                   | 400                     | EWGMR175S       | 38                 | 20              | 175       | 20              | 392.30                 | 3.82                     | 4.59  | 2614 {267}                       | 2204 {225}  | 24451 {2495} | 188          | AH5                             | 190                                          | BH5  |                                          |  |
|                   | 500                     |                 |                    | 25              |           | 20              | 481.82                 | 3.11                     | 3.74  | 3171 {324}                       | 2672 {273}  | 24451 {2495} |              |                                 |                                              |      |                                          |  |
|                   | 600                     | EWGMR200S       | 42                 | 60              | 200       | 10              | 614.92                 | 2.44                     | 2.93  | 4227 {431}                       | 3546 {362}  | 29743 {3035} | 188          | AI5                             | 190                                          | BI5  |                                          |  |
|                   | 800                     |                 |                    | 40              |           | 20              | 785.06                 | 1.91                     | 2.29  | 4802 {490}                       | 4046 {413}  | 29743 {3035} |              |                                 |                                              |      |                                          |  |
|                   | 1000                    | TDGMR200S       | 42                 | 50              | 200       | 20              | 974.08                 | 1.54                     | 1.85  | 7073 {722}                       | 5940 {606}  | 32400 {3306} | 188          | AK3                             | 190                                          | BK3  |                                          |  |
|                   | 1200                    |                 |                    | 60              |           | 20              | 1229.84                | 1.22                     | 1.46  | 8840 {902}                       | 7425 {758}  | 32400 {3306} |              |                                 |                                              |      |                                          |  |
| 2.2               | 200                     | EWGMR150S       | 42                 | 20              | 150       | 10              | 206.59                 | 7.26                     | 8.71  | 2235 {228}                       | 1877 {192}  | 21825 {2227} | 188          | AG8                             | 190                                          | BG8  |                                          |  |
|                   | 300                     | EWGMR175S       | 42                 | 30              | 175       | 10              | 291.43                 | 5.15                     | 6.18  | 3137 {320}                       | 2633 {269}  | 24451 {2495} | 188          | AH6                             | 190                                          | BH6  |                                          |  |
|                   | 400                     | EWGMR200S       | 42                 | 20              | 200       | 20              | 413.18                 | 3.63                     | 4.36  | 3982 {406}                       | 3361 {343}  | 29743 {3035} | 188          | AI6                             | 190                                          | BI6  |                                          |  |
|                   | 500                     |                 |                    | 25              |           | 20              | 509.10                 | 2.95                     | 3.54  | 4837 {494}                       | 4081 {416}  | 29743 {3035} |              |                                 |                                              |      |                                          |  |

## C Type: Tough Package/Hollow Output Shaft [H]

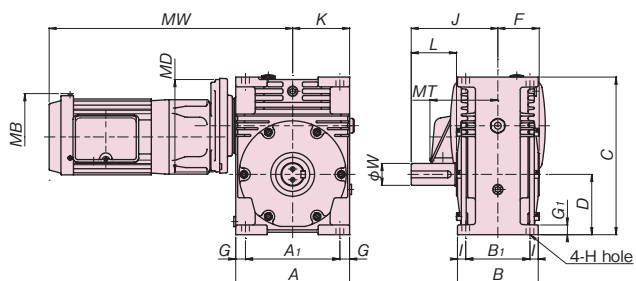
| Motor output (kW) | Nominal Reduction ratio | TERUS Model No. | TERUS combinations |                 |           |                 | Actual reduction ratio | Output shaft speed r/min |       | Allowable torque on output shaft |             | Allowable radial load on output | Mounting direction T/B/E External dimensions |      | Mounting direction V External dimensions |      |
|-------------------|-------------------------|-----------------|--------------------|-----------------|-----------|-----------------|------------------------|--------------------------|-------|----------------------------------|-------------|---------------------------------|----------------------------------------------|------|------------------------------------------|------|
|                   |                         |                 | GMTA               |                 | Worm      |                 |                        |                          |       | 50 Hz                            | 60 Hz       |                                 |                                              |      |                                          |      |
|                   |                         |                 | Frame No.          | Reduction ratio | Frame No. | Reduction ratio |                        | 50 Hz                    | 60 Hz | N·m {kgf·m}                      | N·m {kgf·m} |                                 | N {kgf}                                      | Page | Motor model                              | Page |
| 0.1               | 200                     | SWJGM50H        | 18                 | 20              | 50        | 10              | 198.21                 | 7.57                     | 9.08  | 93 {9.5}                         | 78 {7.9}    | 3305 {337}                      | 192                                          | CA2  | 194                                      | DA2  |
|                   | 300                     | SWJGM63H        | 18                 | 30              | 63        | 10              | 294.64                 | 5.09                     | 6.11  | 136 {14}                         | 114 {12}    | 3153 {322}                      | 192                                          | CA5  | 194                                      | DA5  |
|                   | 400                     |                 |                    | 40              |           | 10              | 401.53                 | 3.74                     | 4.48  | 184 {19}                         | 154 {16}    | 3153 {322}                      |                                              |      |                                          |      |
|                   | 500                     | SWJGM70H        | 18                 | 50              | 70        | 10              | 498.17                 | 3.01                     | 3.61  | 227 {23}                         | 190 {19}    | 3591 {366}                      | 192                                          | CB1  | 194                                      | DB1  |
|                   | 600                     |                 |                    | 40              |           | 15              | 602.30                 | 2.49                     | 2.99  | 251 {26}                         | 211 {22}    | 3591 {366}                      |                                              |      |                                          |      |
|                   | 800                     | SWGM80H         | 18                 | 40              | 80        | 20              | 803.06                 | 1.87                     | 2.24  | 323 {33}                         | 272 {28}    | 8849 {903}                      | 192                                          | CC1  | 194                                      | DC1  |
|                   | 1000                    |                 |                    | 50              |           | 20              | 996.34                 | 1.51                     | 1.81  | 397 {41}                         | 334 {34}    | 8849 {903}                      |                                              |      |                                          |      |
|                   | 1200                    | SWGM100H        | 24                 | 120             | 100       | 10              | 1221.60                | 1.23                     | 1.47  | 538 {55}                         | 451 {46}    | 10711 {1093}                    | 192                                          | CD1  | 194                                      | DD1  |
| 0.2               | 200                     | SWJGM63H        | 18                 | 20              | 63        | 10              | 198.21                 | 7.57                     | 9.08  | 186 {19}                         | 156 {16}    | 3153 {322}                      | 192                                          | CA7  | 194                                      | DA7  |
|                   | 300                     | SWJGM70H        | 18                 | 20              | 70        | 15              | 297.32                 | 5.05                     | 6.05  | 256 {26}                         | 215 {22}    | 3591 {366}                      | 192                                          | CB3  | 194                                      | DB3  |
|                   | 400                     | SWGM80H         | 18                 | 20              | 80        | 20              | 396.42                 | 3.78                     | 4.54  | 330 {34}                         | 278 {28}    | 8849 {903}                      | 192                                          | CC2  | 194                                      | DC2  |
|                   | 500                     |                 |                    | 25              |           | 20              | 496.86                 | 3.02                     | 3.62  | 409 {42}                         | 344 {35}    | 8849 {903}                      |                                              |      |                                          |      |
|                   | 600                     | SWGM100H        | 24                 | 40              | 100       | 15              | 585.45                 | 2.56                     | 3.07  | 514 {52}                         | 432 {44}    | 10711 {1093}                    | 192                                          | CD4  | 194                                      | DD4  |
|                   | 800                     |                 |                    | 40              |           | 20              | 780.60                 | 1.92                     | 2.31  | 639 {65}                         | 537 {55}    | 10711 {1093}                    |                                              |      |                                          |      |
|                   | 1000                    |                 |                    | 50              |           | 20              | 988.14                 | 1.52                     | 1.82  | 777 {79}                         | 653 {67}    | 10711 {1093}                    |                                              |      |                                          |      |
|                   | 1200                    | SWGM125H        | 24                 | 60              | 125       | 20              | 1188.34                | 1.26                     | 1.51  | 950 {97}                         | 798 {81}    | 18531 {1881}                    | 192                                          | CE3  | 194                                      | DE3  |
| 0.4               | 200                     | SWGM80H         | 24                 | 20              | 80        | 10              | 193.88                 | 7.74                     | 9.28  | 371 {38}                         | 311 {32}    | 8849 {903}                      | 192                                          | CC3  | 194                                      | DC3  |
|                   | 300                     | SWGM100H        | 24                 | 20              | 100       | 15              | 290.82                 | 5.16                     | 6.19  | 527 {54}                         | 443 {45}    | 10711 {1093}                    | 192                                          | CD5  | 194                                      | DD5  |
|                   | 400                     |                 |                    | 20              |           | 20              | 387.76                 | 3.87                     | 4.64  | 659 {67}                         | 555 {57}    | 10711 {1093}                    |                                              |      |                                          |      |
|                   | 500                     | SWGM125H        | 24                 | 25              | 125       | 20              | 495.00                 | 3.03                     | 3.64  | 851 {87}                         | 716 {73}    | 18531 {1891}                    | 192                                          | CE5  | 194                                      | DE5  |
|                   | 600                     |                 |                    | 60              |           | 10              | 600.00                 | 2.50                     | 3.00  | 1095 {112}                       | 917 {94}    | 18531 {1891}                    | 192                                          | CE6  | 194                                      | DE6  |
|                   | 800                     |                 |                    | 40              |           | 20              | 810.38                 | 1.85                     | 2.22  | 1318 {135}                       | 1108 {113}  | 18531 {1891}                    |                                              |      |                                          |      |
|                   | 1000                    | SWGM150H        | 28                 | 50              | 150       | 20              | 1018.18                | 1.47                     | 1.77  | 1644 {168}                       | 1382 {141}  | 15680 {1600}                    | 192                                          | CF3  | 194                                      | DF3  |
|                   | 1200                    |                 |                    | 60              |           | 20              | 1200.00                | 1.25                     | 1.50  | 1923 {196}                       | 1616 {165}  | 15680 {1600}                    |                                              |      |                                          |      |
| 0.75              | 200                     | SWGMR100H       | 28                 | 20              | 100       | 10              | 199.48                 | 7.52                     | 9.02  | 727 {74}                         | 610 {62}    | 10711 {1093}                    | 192                                          | CD6  | 194                                      | DD6  |
|                   | 300                     | SWGMR125H       | 28                 | 20              | 125       | 15              | 299.22                 | 5.01                     | 6.02  | 1023 {104}                       | 860 {88}    | 18531 {1891}                    | 192                                          | CE7  | 194                                      | DE7  |
|                   | 400                     |                 |                    | 20              |           | 20              | 398.96                 | 3.76                     | 4.51  | 1301 {133}                       | 1096 {112}  | 18531 {1891}                    |                                              |      |                                          |      |
|                   | 500                     | SWGMR150H       | 28                 | 25              | 150       | 20              | 507.94                 | 2.95                     | 3.54  | 1644 {168}                       | 1385 {141}  | 15680 {1600}                    | 192                                          | CF5  | 194                                      | DF5  |
|                   | 600                     |                 |                    | 30              |           | 20              | 607.62                 | 2.47                     | 2.96  | 1947 {199}                       | 1639 {167}  | 15680 {1600}                    | 192                                          | CF6  | 194                                      | DF6  |
|                   | 800                     |                 |                    | 20              |           | 40              | 797.92                 | 1.88                     | 2.26  | 2091 {213}                       | 1773 {181}  | 15680 {1600}                    | 192                                          | CF5  | 194                                      | DF5  |
|                   | 1000                    | SWGMR175H       | 28                 | 25              | 175       | 40              | 1015.88                | 1.48                     | 1.77  | 2661 {271}                       | 2255 {230}  | 19364 {1976}                    | 192                                          | CG3  | 194                                      | DG3  |
|                   | 1200                    |                 |                    | 30              |           | 40              | 1215.24                | 1.23                     | 1.48  | 3133 {320}                       | 2653 {271}  | 19364 {1976}                    | 192                                          | CG4  | 194                                      | DG4  |
| 1.5               | 200                     | SWGMR150H       | 38                 | 20              | 150       | 10              | 196.15                 | 7.65                     | 9.18  | 1450 {148}                       | 1218 {124}  | 15680 {1600}                    | 192                                          | CF7  | 194                                      | DF7  |
|                   | 300                     |                 |                    | 30              |           | 10              | 300.00                 | 5.00                     | 6.00  | 2180 {222}                       | 1830 {187}  | 15680 {1600}                    |                                              |      |                                          |      |
|                   | 400                     | SWGMR175H       | 38                 | 20              | 175       | 20              | 392.30                 | 3.82                     | 4.59  | 2614 {267}                       | 2204 {225}  | 19364 {1976}                    | 192                                          | CG5  | 194                                      | DG5  |
|                   | 500                     |                 |                    | 25              |           | 20              | 481.82                 | 3.11                     | 3.74  | 3171 {324}                       | 2672 {273}  | 19364 {1976}                    |                                              |      |                                          |      |
|                   | 600                     | SWGMR200H       | 42                 | 60              | 200       | 10              | 614.92                 | 2.44                     | 2.93  | 4227 {431}                       | 3546 {362}  | 22834 {2330}                    | 192                                          | CH5  | 194                                      | DH5  |
|                   | 800                     |                 |                    | 45              |           | 20              | 785.06                 | 1.91                     | 2.29  | 4802 {490}                       | 4046 {413}  | 22834 {2330}                    |                                              |      |                                          |      |
|                   | 1000                    | TDGMR200H       | 42                 | 50              | 200       | 20              | 974.08                 | 1.54                     | 1.85  | 7073 {722}                       | 5940 {606}  | 38803 {3960}                    | 192                                          | CJ3  | 194                                      | DJ3  |
|                   | 1200                    |                 |                    | 60              |           | 20              | 1229.84                | 1.22                     | 1.46  | 8840 {902}                       | 7425 {758}  | 38803 {3960}                    |                                              |      |                                          |      |
| 2.2               | 200                     | SWGMR150H       | 42                 | 20              | 150       | 10              | 206.59                 | 7.26                     | 8.71  | 2235 {228}                       | 1877 {192}  | 15680 {1600}                    | 192                                          | CF8  | 194                                      | DF8  |
|                   | 300                     | SWGMR175H       | 42                 | 30              | 175       | 10              | 291.43                 | 5.15                     | 6.18  | 3137 {320}                       | 2633 {269}  | 19364 {1976}                    | 192                                          | CG6  | 194                                      | DG6  |
|                   | 400                     | SWGMR200H       | 42                 | 20              | 200       | 20              | 413.18                 | 3.63                     | 4.36  | 3982 {406}                       | 3361 {343}  | 22834 {2330}                    | 192                                          | CH6  | 194                                      | DH6  |
|                   | 500                     |                 |                    | 25              |           | 20              | 509.10                 | 2.95                     | 3.54  | 4837 {494}                       | 4081 {416}  | 22834 {2330}                    |                                              |      |                                          |      |

## External Dimensions

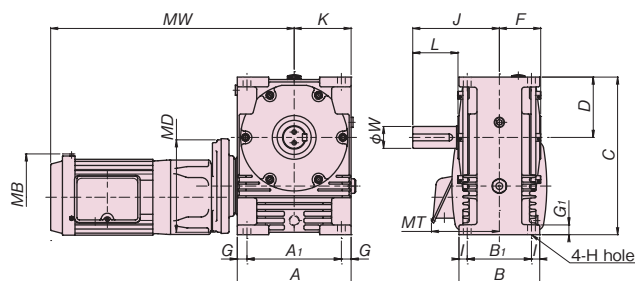
### Solid Output Shaft [S]: Mounting Direction T/B/E Dimensions

#### EWJGM50 to 70S, EWGM(R)80S to 200S TDGMR175S/200S

[E-R] [T-R]

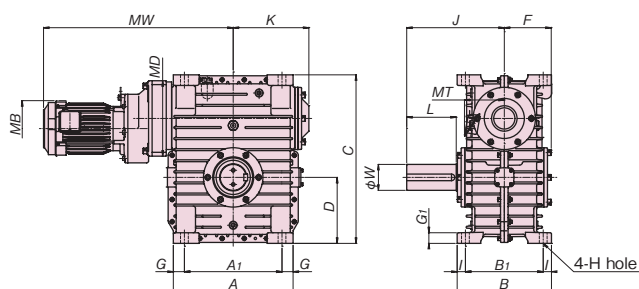


[B-R]

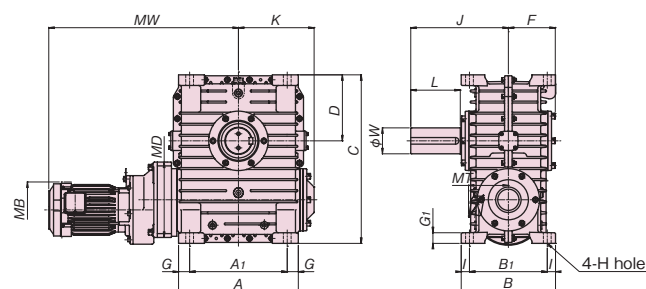


#### TDGMR225S

[T-R]



[B-R]



Note) Refer to page 189 for the detailed dimensions of tap output shaft.

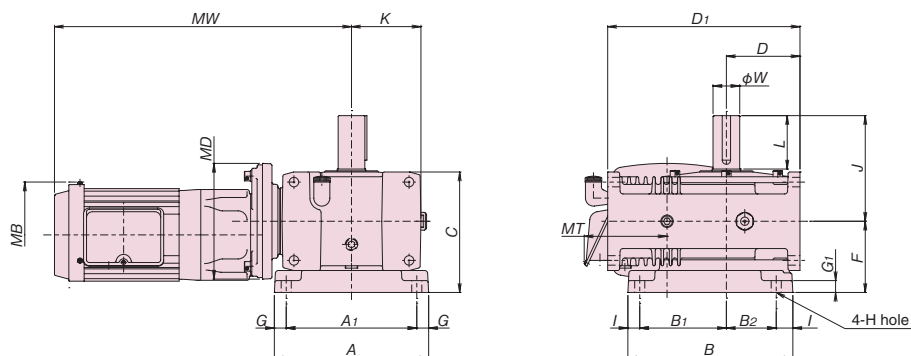


### External Dimensions

#### Solid Output Shaft [S]: Mounting Direction V Dimensions

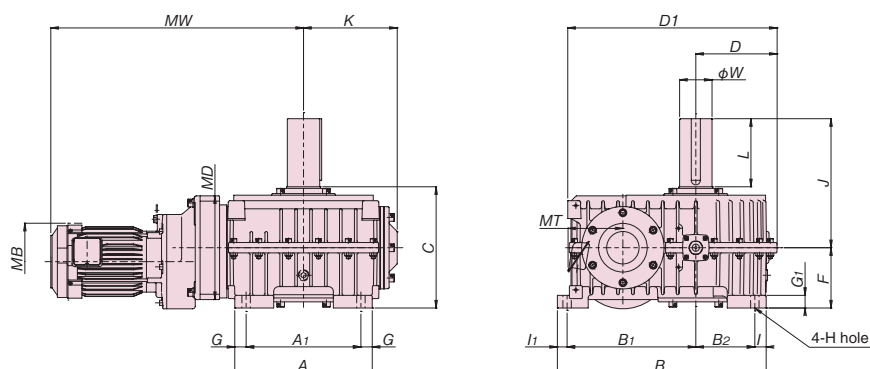
■ EWJGM50 to 70S, EWGM(R)80S to 200S  
TDGMR175S/200S

[V-LU]

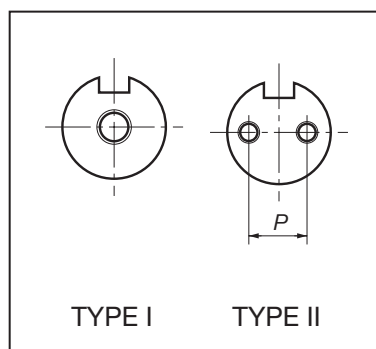


■ TDGMR225S

[V-LU]



#### Output shaft tap dimensions (Common for mounting directions T, B, E, and V)



| Size      | EWJGM50S | EWJGM63S | EWJGM70S | EWGM(R)80S | EWGM(R)100S |
|-----------|----------|----------|----------|------------|-------------|
| Type      | I        | I        | II       | II         | II          |
| Size      | M8       | M10      | M10      | M8         | M10         |
| Depth (L) | 16       | 20       | 20       | 16         | 20          |
| Pitch (P) | —        | —        | —        | 20         | 22          |

| Size      | EWGM(R)125S | EWGM(R)150S | EWGM(R)175S<br>TDGMR 175S | EWGM(R)200S<br>TDGMR 200S | TDGMR225S |
|-----------|-------------|-------------|---------------------------|---------------------------|-----------|
| Type      | II          | II          | II                        | II                        | II        |
| Size      | M10         | M12         | M12                       | M12                       | M16       |
| Depth (L) | 20          | 24          | 24                        | 24                        | 32        |
| Pitch (P) | 36          | 36          | 36                        | 45                        | 60        |

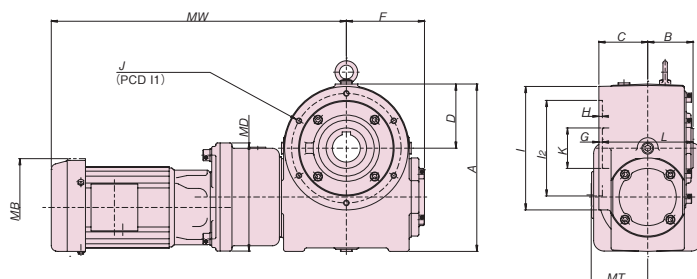


## External Dimensions

### Hollow Output Shaft [H]: Mounting Direction T/B/E Dimensions

#### ■ SWJGM50H to 70H

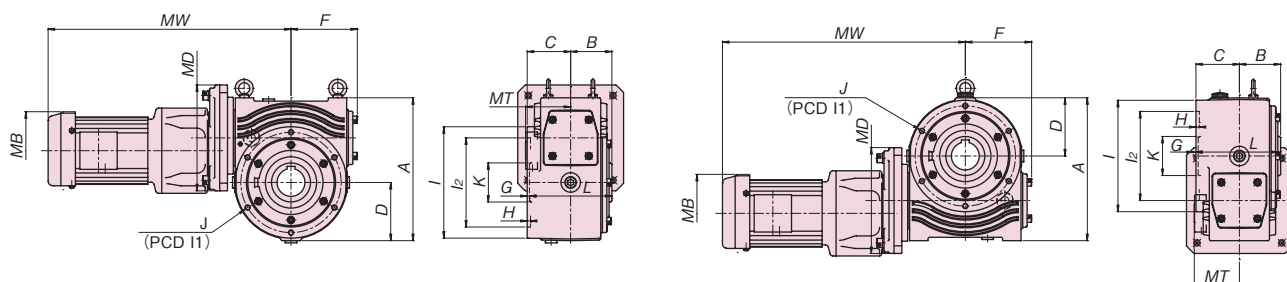
[E-DF] [E-RF]



#### ■ SWJGM(R)80H to 200H/TDGMR175H/200H

[T-RF]

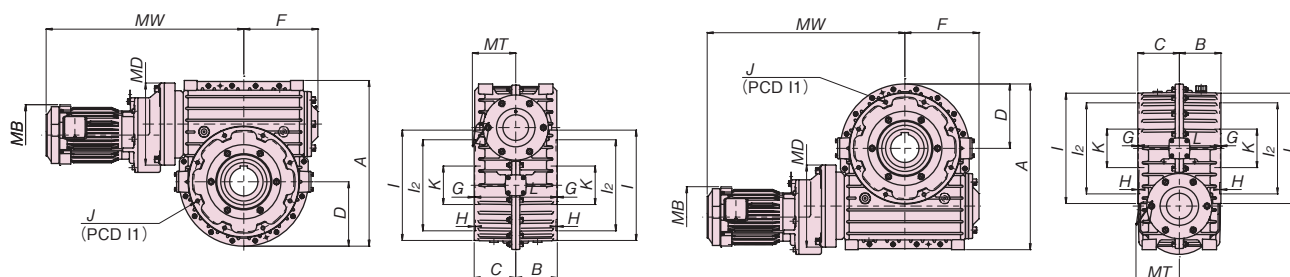
[B-RF]



#### ■ TDGMR225H

[T-DF]

[B-DF]



Note) Refer to page 193 for the detailed dimensions of hollow output shaft.

## SWJGM50H to 70H/SWGM(R)80H to 200H

Note: Values in ( ) are for a motor with a brake. An asterisk (\*) indicates models with GM couplings. Unit: mm

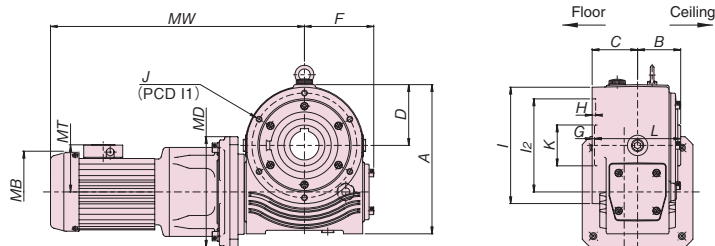
| Size        | A     | B   | C   | D     | F   | G  | H | φ I | I <sub>1</sub> | φ I <sub>2</sub> | J (evenly spaced) | Output shaft dimensions |     |     |        | Motor model | Geared motor related dimensions |         |           |     | T/B/E type<br>Estimated mass kg |           |
|-------------|-------|-----|-----|-------|-----|----|---|-----|----------------|------------------|-------------------|-------------------------|-----|-----|--------|-------------|---------------------------------|---------|-----------|-----|---------------------------------|-----------|
|             |       |     |     |       |     |    |   |     |                |                  |                   | φ K                     | L   | φ U | Keyway |             | MW                              | MB      | MD        | MT  |                                 |           |
| SWJGM50H    | 180   | 56  | 56  | 72    | 74  | 2  | 6 | 138 | 120            | 100              | 4-M8 16 deep      | 45                      | 108 | 30  | 8      | CA1*        | 360                             | (398.0) | 127 (140) | 155 | 81 (104.5)                      | 21 (23)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CA2*        | 380.5                           | (418.5) | 127 (140) | 165 | 81 (104.5)                      | 23 (24)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CA3*        | 398                             | (415.0) | 140 (140) | 155 | 81 (104.5)                      | 21 (23)   |
| SWJGM63H    | 220   | 66  | 66  | 87    | 90  | 2  | 2 | 165 | 145            | 120              | 4-M10 18 deep     | 48                      | 128 | 35  | 10     | CA5*        | 385                             | (423.0) | 127 (140) | 155 | 81 (104.5)                      | 27 (28)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CA6*        | 405.5                           | (443.5) | 127 (140) | 165 | 81 (104.5)                      | 29 (30)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CA7*        | 423                             | (440.0) | 140 (140) | 165 | 81 (104.5)                      | 27 (29)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CA8*        | 443.5                           | (460.5) | 140 (140) | 155 | 81 (104.5)                      | 29 (31)   |
| SWJGM70H    | 240   | 65  | 70  | 92    | 112 | 5  | 5 | 177 | 157            | 137              | 6-M8 15 deep      | 58                      | 130 | 40  | 12     | CB1*        | 385                             | (423.0) | 127 (140) | 155 | 81 (104.5)                      | 34 (36)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CB2*        | 443.5                           | (460.5) | 140 (140) | 165 | 81 (104.5)                      | 36 (38)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CB3*        | 423                             | (440.0) | 140 (140) | 155 | 81 (104.5)                      | 34 (36)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CB4*        | 482                             | (499.0) | 140 (140) | 165 | 81 (104.5)                      | 36 (38)   |
| SWGM(R)80H  | 256.5 | 74  | 78  | 104.5 | 119 | 4  | 6 | 200 | 180            | 160              | 6-M10 20 deep     | 70                      | 148 | 50  | 14     | CC1         | 332                             | (370.0) | 127 (140) | 155 | 81 (104.5)                      | 34 (36)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CC2         | 370                             | (387.0) | 140 (140) | 155 | 81 (104.5)                      | 35 (37)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CC3         | 390.5                           | (407.5) | 140 (140) | 165 | 81 (104.5)                      | 37 (39)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CC4         | 412                             | (429.0) | 140 (140) | 165 | 81 (104.5)                      | 37 (40)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CC5         | 478.5                           | (523.5) | 178 (178) | 190 | 140 (140.0)                     | 49 (52)   |
| SWGM(R)100H | 296   | 87  | 90  | 120   | 140 | 3  | 7 | 230 | 205            | 185              | 6-M10 20 deep     | 80                      | 174 | 55  | 16     | CD1         | 354                             | (392.0) | 127 (140) | 155 | 81 (104.5)                      | 46 (48)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CD2         | 374.5                           | (412.5) | 127 (140) | 165 | 81 (104.5)                      | 48 (50)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CD3         | 392                             | (409.0) | 140 (140) | 155 | 81 (104.5)                      | 47 (49)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CD4         | 412.5                           | (429.5) | 140 (140) | 165 | 81 (104.5)                      | 49 (51)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CD5         | 434                             | (451.0) | 140 (140) | 165 | 81 (104.5)                      | 49 (52)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CD6         | 500.5                           | (545.5) | 178 (178) | 190 | 140 (140.0)                     | 61 (64)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CD7         | 575.5                           | (639.5) | 204 (202) | 280 | 158 (155.0)                     | 90 (95)   |
| SWGM(R)125H | 360   | 100 | 110 | 148   | 174 | 10 | 6 | 285 | 255            | 230              | 6-M12 25 deep     | 105                     | 200 | 70  | 20     | CE1         | 409.5                           | (447.5) | 127 (140) | 165 | 81 (104.5)                      | 82 (84)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CE2         | 427                             | (444.0) | 140 (140) | 155 | 81 (104.5)                      | 81 (83)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CE3         | 447.5                           | (464.5) | 140 (140) | 165 | 81 (104.5)                      | 83 (85)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CE4         | 469                             | (486.0) | 140 (140) | 190 | 81 (104.5)                      | 87 (89)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CE5         | 469                             | (486.0) | 140 (140) | 165 | 81 (104.5)                      | 83 (86)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CE6         | 494                             | (511.0) | 140 (140) | 190 | 81 (104.5)                      | 87 (90)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CE7         | 536.5                           | (581.5) | 178 (178) | 190 | 140 (140.0)                     | 95 (98)   |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CE8         | 608.5                           | (672.5) | 204 (202) | 280 | 158 (155.0)                     | 124 (129) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CE9         | 624                             | (679.5) | 218 (226) | 255 | 169 (166.0)                     | 141 (148) |
| SWGM(R)150H | 420   | 125 | 125 | 173   | 204 | —  | 6 | 335 | 300            | 270              | 8-M12 25 deep     | 115                     | 250 | 80  | 22     | CF1         | 498                             | (515.0) | 140 (140) | 190 | 81 (104.5)                      | 128 (130) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CF2         | 499                             | (516.0) | 140 (140) | 165 | 81 (104.5)                      | 124 (127) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CF3         | 523                             | (540.0) | 140 (140) | 190 | 81 (104.5)                      | 128 (131) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CF4         | 552.5                           | (569.5) | 140 (140) | 280 | 81 (104.5)                      | 148 (150) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CF5         | 565.5                           | (610.5) | 178 (178) | 190 | 140 (140.0)                     | 136 (139) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CF6         | 598                             | (643.0) | 178 (178) | 280 | 140 (140.0)                     | 156 (160) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CF7         | 641.5                           | (705.5) | 204 (202) | 280 | 158 (155.0)                     | 165 (170) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CF8         | 665                             | (720.5) | 218 (226) | 255 | 169 (166.0)                     | 182 (189) |
| SWGM(R)175H | 493   | 135 | 135 | 203   | 234 | —  | 5 | 385 | 350            | 320              | 8-M14 30 deep     | 125                     | 270 | 90  | 25     | CG1         | 553                             | (570.0) | 140 (140) | 190 | 81 (104.5)                      | 183 (186) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CG2         | 576.5                           | (593.5) | 140 (140) | 280 | 81 (104.5)                      | 203 (205) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CG3         | 595.5                           | (640.5) | 178 (178) | 190 | 140 (140.0)                     | 191 (194) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CG4         | 622                             | (667.0) | 178 (178) | 280 | 140 (140.0)                     | 211 (215) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CG5         | 665.5                           | (729.5) | 204 (202) | 280 | 158 (155.0)                     | 220 (225) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CG6         | 688                             | (743.5) | 218 (226) | 255 | 169 (166.0)                     | 237 (244) |
| SWGM(R)200H | 543   | 145 | 145 | 223   | 262 | —  | 5 | 420 | 380            | 340              | 8-M16 30 deep     | 145                     | 290 | 100 | 28     | CH1         | 607.5                           | (624.5) | 140 (140) | 280 | 81 (104.5)                      | 269 (271) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CH2         | 653                             | (698.0) | 178 (178) | 280 | 140 (140.0)                     | 277 (281) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CH3         | 667                             | (712.0) | 178 (178) | 255 | 140 (140.0)                     | 289 (292) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CH4         | 696.5                           | (760.5) | 204 (202) | 280 | 158 (155.0)                     | 286 (291) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CH5         | 700                             | (764.0) | 204 (202) | 255 | 158 (155.0)                     | 296 (301) |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | CH6         | 715                             | (770.5) | 218 (226) | 255 | 169 (166.0)                     | 303 (310) |

## External Dimensions

### Hollow Output Shaft [H]: Mounting Direction V Dimensions

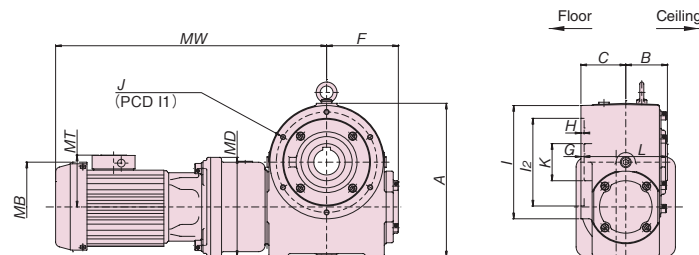
#### ■ SWJGM50H to 70H

[V-RF]



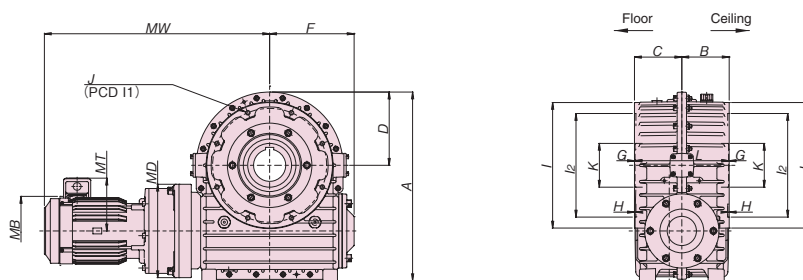
#### ■ SWJGM(R)80H to 200H/TDGMR175H/200H

[V-RF]



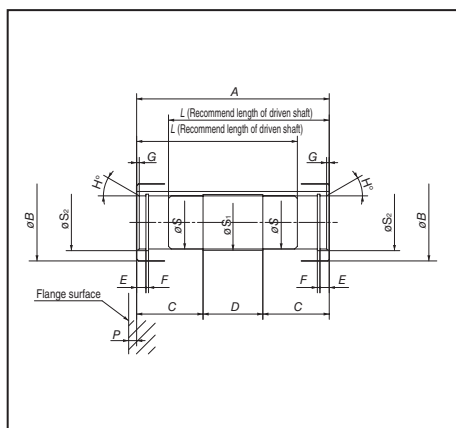
#### ■ TDGMR225H

[V-RF]



### Detailed dimensions of hollow output shaft

Unit: mm



| Size       | A   | B   | C   | D   | E  | F    | G   | H   | P  | S (H8) | S <sub>1</sub> | S <sub>2</sub> | L   |
|------------|-----|-----|-----|-----|----|------|-----|-----|----|--------|----------------|----------------|-----|
| SWJGM 50   | 108 | 45  | 35  | 38  | 5  | 1.35 | 1.5 | 30° | 2  | 30     | 31             | 31.4           | 89  |
| SWJGM 63   | 128 | 48  | 40  | 48  | 6  | 1.65 | 2   | 30° | 2  | 35     | 26             | 37             | 109 |
| SWJGM 70   | 130 | 58  | 45  | 40  | 7  | 1.95 | 2   | 30° | 5  | 40     | 41             | 42.5           | 106 |
| SWGM(R)80  | 148 | 70  | 50  | 48  | 8  | 2.2  | 3   | 30° | 4  | 50     | 51             | 53             | 122 |
| SWGM(R)100 | 174 | 80  | 60  | 54  | 8  | 2.2  | 3   | 30° | 3  | 55     | 56             | 58             | 146 |
| SWGM(R)125 | 200 | 105 | 70  | 60  | 8  | 2.7  | 3   | 30° | 10 | 70     | 71             | 73             | 170 |
| SWGM(R)150 | 250 | 115 | 80  | 90  | 8  | 2.7  | 4   | 30° | 0  | 80     | 81             | 83.5           | 220 |
| SWGM(R)175 | 270 | 125 | 90  | 90  | 9  | 3.2  | 4   | 30° | 0  | 90     | 91             | 93.5           | 238 |
| SWGM(R)200 | 290 | 145 | 95  | 100 | 9  | 3.2  | 4   | 30° | 0  | 100    | 101            | 103.5          | 258 |
| TDGMR175H  | 270 | 125 | 90  | 90  | 9  | 3.2  | 4   | 30° | 0  | 90     | 91             | 93.5           | 238 |
| TDGMR200H  | 290 | 145 | 95  | 100 | 9  | 3.2  | 4   | 30° | 0  | 100    | 101            | 103.5          | 258 |
| TDGMR225H  | 320 | 150 | 108 | 104 | 12 | 4.2  | 4   | 30° | 2  | 110    | 111            | 114            | 272 |

Note) Dimension "P" measures from the flange surface to the end of the shaft.

## SWJGM50H to 70H/SWGM(R)80H to 200H

Note: Values in ( ) are for a motor with a brake. An asterisk (\*) indicates models with GM couplings. Unit: mm

| Size        | A     | B   | C   | D     | F   | G  | H | φ I | I <sub>1</sub> | φ I <sub>2</sub> | J (evenly spaced) | Output shaft dimensions |     |     |        | Motor model        | Geared motor related dimensions |     |             |           | V type<br>Estimated mass kg |
|-------------|-------|-----|-----|-------|-----|----|---|-----|----------------|------------------|-------------------|-------------------------|-----|-----|--------|--------------------|---------------------------------|-----|-------------|-----------|-----------------------------|
|             |       |     |     |       |     |    |   |     |                |                  |                   | φ K                     | L   | φ U | Keyway |                    | MW                              | MB  | MD          | MT        |                             |
| SWJGM50H    | 180   | 56  | 56  | 72    | 74  | 2  | 6 | 138 | 120            | 100              | 4-M8 16 deep      | 45                      | 108 | 30  | 8      | DA1* 360 (398.0)   | 127 (140)                       | 155 | 81 (104.5)  | 21 (23)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DA2* 380.5 (418.5) | 127 (140)                       | 165 | 81 (104.5)  | 23 (24)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DA3* 398 (415.0)   | 140 (140)                       | 155 | 81 (104.5)  | 21 (23)   |                             |
| SWJGM63H    | 220   | 66  | 66  | 87    | 90  | 2  | 2 | 165 | 145            | 120              | 4-M10 18 deep     | 48                      | 128 | 35  | 10     | DA5* 385 (423.0)   | 127 (140)                       | 155 | 81 (104.5)  | 27 (28)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DA6* 405.5 (443.5) | 127 (140)                       | 165 | 81 (104.5)  | 29 (30)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DA7* 423 (440.0)   | 140 (140)                       | 165 | 81 (104.5)  | 27 (29)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DA8* 443.5 (460.5) | 140 (140)                       | 155 | 81 (104.5)  | 29 (31)   |                             |
| SWJGM70H    | 240   | 65  | 70  | 92    | 112 | 5  | 5 | 177 | 157            | 137              | 6-M8 15 deep      | 58                      | 130 | 40  | 12     | DB1* 385 (423.0)   | 127 (140)                       | 155 | 81 (104.5)  | 34 (36)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DB2* 443.5 (460.5) | 140 (140)                       | 165 | 81 (104.5)  | 36 (38)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DB3* 423 (440.0)   | 140 (140)                       | 155 | 81 (104.5)  | 34 (36)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DB4* 482 (499.0)   | 140 (140)                       | 165 | 81 (104.5)  | 36 (38)   |                             |
| SWGM(R)80H  | 256.5 | 74  | 78  | 104.5 | 119 | 4  | 6 | 200 | 180            | 160              | 6-M10 20 deep     | 70                      | 148 | 50  | 14     | DC1 332 (370.0)    | 127 (140)                       | 155 | 81 (104.5)  | 34 (36)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DC2 370 (387.0)    | 140 (140)                       | 155 | 81 (104.5)  | 35 (37)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DC3 390.5 (407.5)  | 140 (140)                       | 165 | 81 (104.5)  | 37 (39)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DC4 412 (429.0)    | 140 (140)                       | 165 | 81 (104.5)  | 37 (40)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DC5 478.5 (523.5)  | 178 (178)                       | 190 | 140 (140.0) | 49 (52)   |                             |
| SWGM(R)100H | 296   | 87  | 90  | 120   | 140 | 3  | 7 | 230 | 205            | 185              | 6-M10 20 deep     | 80                      | 174 | 55  | 16     | DD1 354 (392.0)    | 127 (140)                       | 155 | 81 (104.5)  | 46 (48)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DD2 374.5 (412.5)  | 127 (140)                       | 165 | 81 (104.5)  | 48 (50)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DD3 392 (409.0)    | 140 (140)                       | 155 | 81 (104.5)  | 47 (49)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DD4 412.5 (429.5)  | 140 (140)                       | 165 | 81 (104.5)  | 49 (51)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DD5 434 (451.0)    | 140 (140)                       | 165 | 81 (104.5)  | 49 (52)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DD6 500.5 (545.5)  | 178 (178)                       | 190 | 140 (140.0) | 61 (64)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DD7 575.5 (639.5)  | 204 (202)                       | 280 | 158 (155.0) | 90 (95)   |                             |
| SWGM(R)125H | 360   | 100 | 110 | 148   | 174 | 10 | 6 | 285 | 255            | 230              | 6-M12 25 deep     | 105                     | 200 | 70  | 20     | DE1 409.5 (447.5)  | 127 (140)                       | 165 | 81 (104.5)  | 82 (84)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DE2 427 (444.0)    | 140 (140)                       | 155 | 81 (104.5)  | 81 (83)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DE3 447.5 (464.5)  | 140 (140)                       | 165 | 81 (104.5)  | 83 (85)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DE4 469 (486.0)    | 140 (140)                       | 190 | 81 (104.5)  | 87 (89)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DE5 469 (486.0)    | 140 (140)                       | 165 | 81 (104.5)  | 83 (86)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DE6 494 (511.0)    | 140 (140)                       | 190 | 81 (104.5)  | 87 (90)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DE7 536.5 (581.5)  | 178 (178)                       | 190 | 140 (140.0) | 95 (98)   |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DE8 608.5 (672.5)  | 204 (202)                       | 280 | 158 (155.0) | 124 (129) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DE9 624 (679.5)    | 218 (226)                       | 255 | 169 (166.0) | 141 (148) |                             |
| SWGM(R)150H | 420   | 125 | 125 | 173   | 204 | —  | 6 | 335 | 300            | 270              | 8-M12 25 deep     | 115                     | 250 | 80  | 22     | DF1 498 (515.0)    | 140 (140)                       | 190 | 81 (104.5)  | 128 (130) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DF2 499 (516.0)    | 140 (140)                       | 165 | 81 (104.5)  | 124 (127) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DF3 523 (540.0)    | 140 (140)                       | 190 | 81 (104.5)  | 128 (131) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DF4 552.5 (569.5)  | 140 (140)                       | 280 | 81 (104.5)  | 148 (150) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DF5 565.5 (610.5)  | 178 (178)                       | 190 | 140 (140.0) | 136 (139) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DF6 598 (643.0)    | 178 (178)                       | 280 | 140 (140.0) | 156 (160) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DF7 641.5 (705.5)  | 204 (202)                       | 280 | 158 (155.0) | 165 (170) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DF8 665 (720.5)    | 218 (226)                       | 255 | 169 (166.0) | 182 (189) |                             |
| SWGM(R)175H | 493   | 135 | 135 | 203   | 234 | —  | 5 | 385 | 350            | 320              | 8-M14 30 deep     | 125                     | 270 | 90  | 25     | DG1 553 (570.0)    | 140 (140)                       | 190 | 81 (104.5)  | 183 (186) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DG2 576.5 (593.5)  | 140 (140)                       | 280 | 81 (104.5)  | 203 (205) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DG3 595.5 (640.5)  | 178 (178)                       | 190 | 140 (140.0) | 191 (194) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DG4 622 (667.0)    | 178 (178)                       | 280 | 140 (140.0) | 211 (215) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DG5 665.5 (729.5)  | 204 (202)                       | 280 | 158 (155.0) | 220 (225) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DG6 688 (743.5)    | 218 (226)                       | 255 | 169 (166.0) | 237 (244) |                             |
| SWGM(R)200H | 543   | 145 | 145 | 223   | 262 | —  | 5 | 420 | 380            | 340              | 8-M16 30 deep     | 145                     | 290 | 100 | 28     | DH1 607.5 (624.5)  | 140 (140)                       | 280 | 81 (104.5)  | 269 (271) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DH2 653 (698.0)    | 178 (178)                       | 280 | 140 (140.0) | 277 (281) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DH3 667 (712.0)    | 178 (178)                       | 255 | 140 (140.0) | 289 (292) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DH4 696.5 (760.5)  | 204 (202)                       | 280 | 158 (155.0) | 286 (291) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DH5 700 (764.0)    | 204 (202)                       | 255 | 158 (155.0) | 296 (301) |                             |
|             |       |     |     |       |     |    |   |     |                |                  |                   |                         |     |     |        | DH6 715 (770.5)    | 218 (226)                       | 255 | 169 (166.0) | 303 (310) |                             |



**PT. MASA JAYA PERKASA**

**M** [info@masajayaperkasa.com](mailto:info@masajayaperkasa.com)

**Jl. Hayam Wuruk No. 76,  
Jakarta Barat, DKI Jakarta 11160**

**(+62)21-649-6496**

**(+62)852-1116-7713**