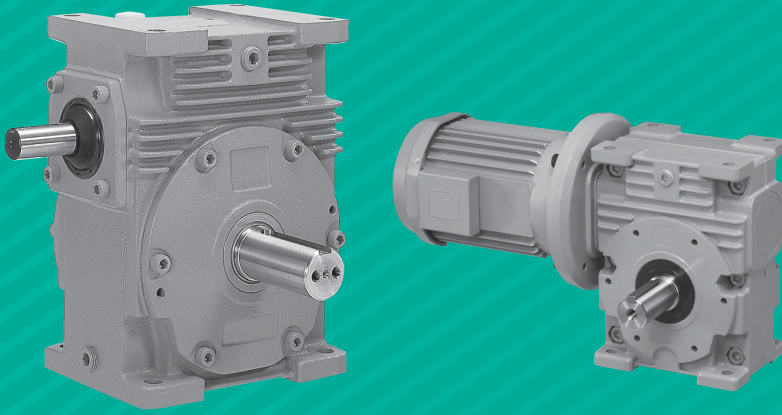
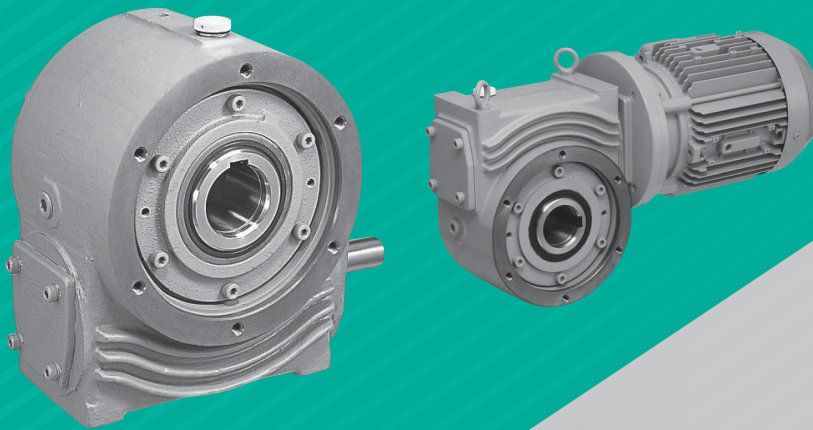




## ***EWJ/EW/SWJ/SW Series***

**Single Reduction (Reduction ratio 1/10 to 1/60)**



|                                                   |         |
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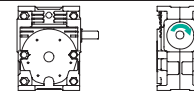
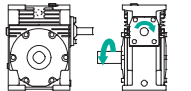
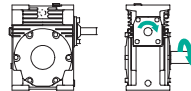
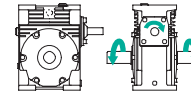
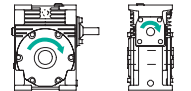
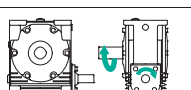
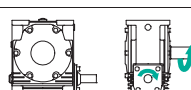
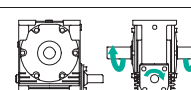
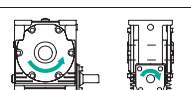
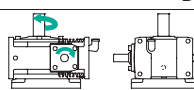
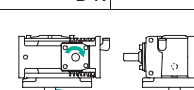
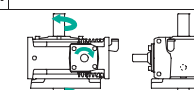
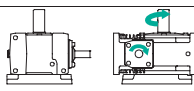
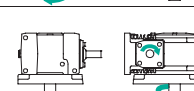
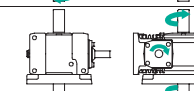
## Model

| Series                                                         | Size                     | Installation direction                                                                                                                                 | Reduction ratio                                                                                                                                                                                                      | Shaft arrangement                                                                            | Motor kW         | Motor specifications                                                                                                               | Option                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EWJ<br>EWJM<br>EW<br>EWM<br>SWJ<br>SWJM<br>SW<br>SWM<br>Series | Single Reduction         |                                                                                                                                                        |                                                                                                                                                                                                                      |                                                                                              |                  |                                                                                                                                    |                                                                                                                                                                                                                                                                                                           |
|                                                                | Without motor <b>EWJ</b> | <b>25</b>                                                                                                                                              | <b>E</b>                                                                                                                                                                                                             | <b>10</b>                                                                                    | <b>L</b>         |                                                                                                                                    | - <b>T2</b>                                                                                                                                                                                                                                                                                               |
|                                                                | <b>SWJ</b>               | <b>50</b>                                                                                                                                              | <b>E</b>                                                                                                                                                                                                             | <b>20</b>                                                                                    | <b>DF</b>        |                                                                                                                                    |                                                                                                                                                                                                                                                                                                           |
|                                                                | <b>EW</b>                | <b>100</b>                                                                                                                                             | <b>B</b>                                                                                                                                                                                                             | <b>30</b>                                                                                    | <b>R</b>         |                                                                                                                                    |                                                                                                                                                                                                                                                                                                           |
|                                                                | <b>SW</b>                | <b>100</b>                                                                                                                                             | <b>B</b>                                                                                                                                                                                                             | <b>40</b>                                                                                    | <b>LF</b>        |                                                                                                                                    |                                                                                                                                                                                                                                                                                                           |
|                                                                | With motor <b>EWJM</b>   | <b>42</b>                                                                                                                                              | <b>E</b>                                                                                                                                                                                                             | <b>30</b>                                                                                    | <b>LR</b>        | <b>040</b>                                                                                                                         | <b>S</b>                                                                                                                                                                                                                                                                                                  |
|                                                                | <b>SWJM(R)</b>           | <b>63</b>                                                                                                                                              | <b>E</b>                                                                                                                                                                                                             | <b>40</b>                                                                                    | <b>DF</b>        | <b>075</b>                                                                                                                         | - <b>H-K</b>                                                                                                                                                                                                                                                                                              |
|                                                                | <b>EWM(R)</b>            | <b>100</b>                                                                                                                                             | <b>T</b>                                                                                                                                                                                                             | <b>25</b>                                                                                    | <b>H</b>         | <b>370</b>                                                                                                                         |                                                                                                                                                                                                                                                                                                           |
|                                                                | <b>SWM(R)</b>            | <b>100</b>                                                                                                                                             | <b>V</b>                                                                                                                                                                                                             | <b>60</b>                                                                                    | <b>SRF</b>       | <b>220</b>                                                                                                                         | <b>B</b> - <b>V</b>                                                                                                                                                                                                                                                                                       |
|                                                                | With motor               | EWJ/SWJ<br>25/35/42<br>50/63/70<br>.....<br>EWJM(R)<br>42/50<br>63/70<br>.....<br>SWJM<br>35/42/50<br>63/70<br>.....<br>EWJMR<br>EWMR<br>SWJMR<br>SWMR | EWJ25 to 42<br>EWJM42<br>SWJ25 to 70<br>SWJM35 to 70<br>E: E type<br>.....<br>EWJ50 to 70<br>EWJM50 to 70<br>E: E type<br>V: V type<br>.....<br>EW/EWM<br>SW/SWM<br>80 to 200<br>T: T type<br>B: B type<br>V: V type | 10: 1/10<br>15: 1/15<br>20: 1/20<br>25: 1/25<br>30: 1/30<br>40: 1/40<br>50: 1/50<br>60: 1/60 | Refer to page 24 | (3-phase)<br>010: 0.1 kW<br>020: 0.2 kW<br>040: 0.4 kW<br>075: 0.75 kW<br>150: 1.5 kW<br>220: 2.2 kW<br>370: 3.7 kW<br>550: 5.5 kW | 0.1 to 0.4 kW<br>S:<br>Standard motor mounted.<br><br>SB:<br>Standard motor with brake mounted.<br><br>SX:<br>Customer-supplied motor mounted.<br><br>Y:<br>Customer to mount motor<br>.....<br>0.75 to 5.5 kW<br>No code:<br>IE3 motor without brake mounted.<br><br>B:<br>IE3 motor with brake mounted. |
|                                                                |                          |                                                                                                                                                        |                                                                                                                                                                                                                      |                                                                                              |                  |                                                                                                                                    | Reducer<br>Refer to pages 229 to 241<br>.....<br>Motor<br>Refer to pages 242 to 243                                                                                                                                                                                                                       |

# Shaft Arrangement

## EWJ/EW Series

Arrows in figures indicate direction of rotation.

|        |                                                                                   |      |                                                                                   |      |                                                                                     |       |                                                                                     |     |
|--------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------|-----|
| E type |  | E-L  |  | E-R  |  | E-LR  |                                                                                     |     |
| T type |  | T-L  |  | T-R  |   | T-LR  |  | T-H |
| B type |  | B-L  |  | B-R  |   | B-LR  |  | B-H |
| V type |  | V-LU |  | V-LD |  | V-LUD |                                                                                     |     |
|        |  | V-RU |  | V-RD |  | V-RUD |                                                                                     |     |

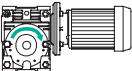
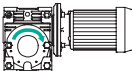
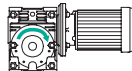
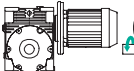
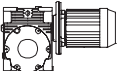
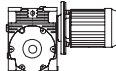
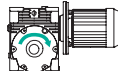
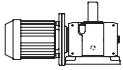
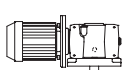
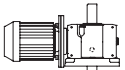
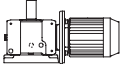
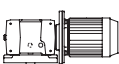
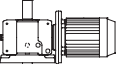
Note 1) E type applies to the EWJ series.

2) The hollow output shaft type (-H) applies to the EW series.

3) Keyway positions do not match one another on double output shafts. Please contact Tsubaki representative when required.

## EWJM(R)/EWM(R) Series

Arrows in figures indicate direction of rotation.

|        |                                                                                     |                                                                                     |      |                                                                                     |                                                                                      |      |                                                                                       |                                                                                       |       |                                                                                       |                                                                                       |     |
|--------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----|
| E type |   |   | E-L  |   |   | E-R  |   |   | E-LR  |                                                                                       |                                                                                       |     |
| T type |  |  | T-L  |  |   | T-R  |   |  | T-LR  |  |  | T-H |
| V type |  |  | V-LU |  |  | V-LD |  |  | V-LUD |                                                                                       |                                                                                       |     |
|        |  |  | V-RU |  |  | V-RD |  |  | V-RUD |                                                                                       |                                                                                       |     |

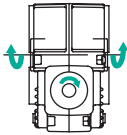
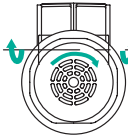
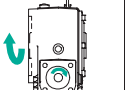
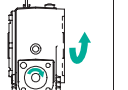
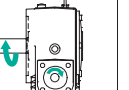
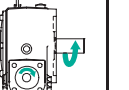
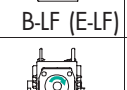
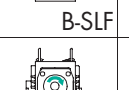
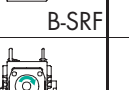
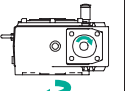
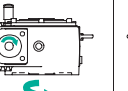
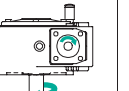
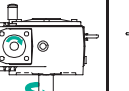
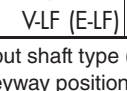
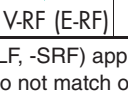
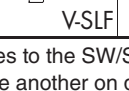
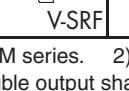
Note 1) E type applies to the EWJM(R) series.

2) The hollow output shaft type (-H) applies to the EWM(R) series.

3) Keyway positions do not match one another on double output shafts. Please contact Tsubaki representative when required.

## SWJ/SW/SWJM(R)/SWM(R) Series

Arrows in figures indicate direction of rotation.

|                    | Without motor                                                                       |             |                                                                                     |             | With motor                                                                           |       |                                                                                     |       |
|--------------------|-------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------|-------|
| E type             |  | E-DF        |                                                                                     |             |  | E-DF  |                                                                                     |       |
| B type<br>(E type) |  | B-LF (E-LF) |  | B-RF (E-RF) |   | B-SLF |  | B-SRF |
|                    |  | B-LF (E-LF) |  | B-RF (E-RF) |   | B-SLF |  | B-SRF |
| T type<br>(E type) |  | T-LF (E-RF) |  | T-RF (E-LF) |   | T-SLF |  | T-SRF |
|                    |  | T-LF (E-RF) |  | T-RF (E-LF) |   | T-SLF |  | T-SRF |
| V type<br>(E type) |  | V-LF (E-LF) |  | V-RF (E-RF) |   | V-SLF |  | V-SRF |
|                    |  | V-LF (E-LF) |  | V-RF (E-RF) |   | V-SLF |  | V-SRF |

Note 1) The solid output shaft type (-SLF, -SRF) applies to the SW/SWM series.

2) The shaft arrangement for SWJ25 to 63 and SWJM35 to 63 is E-DF.

3) Keyway positions do not match one another on double output shafts. Please contact Tsubaki representative when required.

## Models

| Series                 |                     | EWJ          | SWJ            | EW           | SW         | EW           | SW         | EWJ/EW                             | SW         | Reducer options | EWJ/SWJ                | EW/SW                                                             | SWJ/SW     | SWJ/SW     |                             |
|------------------------|---------------------|--------------|----------------|--------------|------------|--------------|------------|------------------------------------|------------|-----------------|------------------------|-------------------------------------------------------------------|------------|------------|-----------------------------|
| Installation direction |                     | E            |                | T            |            | B            |            | V                                  |            |                 | E                      | T, B, V                                                           | E, T, B, V | E, T, B, V |                             |
| Shaft arrangement      | Solid output shaft  | L<br>R<br>LR | —              | L<br>R<br>LR | SLF<br>SRF | L<br>R<br>LR | SLF<br>SRF | LU<br>LD<br>LUD<br>RU<br>RD<br>RUD | SLF<br>SRF |                 | Double input shaft: T2 | Double input shaft: Refer to page 232 for information on symbols. | —          | —          |                             |
|                        | Hollow output shaft | —            | DF<br>LF<br>RF | H            | LF<br>RF   | H            | LF<br>RF   | —                                  | LF<br>RF   |                 |                        |                                                                   |            |            | Power-Lock specification: K |
| Without motor          | EWJ/SWJ25           | ○            | ○              | —            | —          | —            | —          | —                                  | —          | ○               | —                      | —                                                                 | —          |            |                             |
|                        | EWJ/SWJ35           | ○            | ○              | —            | —          | —            | —          | —                                  | —          | ○               | —                      | —                                                                 | —          |            |                             |
|                        | EWJ/SWJ42           | ○            | ○              | —            | —          | —            | —          | —                                  | —          | ○               | —                      | —                                                                 | —          |            |                             |
|                        | EWJ/SWJ50           | ○            | ○              | —            | —          | —            | —          | ○                                  | —          | △               | —                      | □                                                                 | —          |            |                             |
|                        | EWJ/SWJ63           | ○            | ○              | —            | —          | —            | —          | ○                                  | —          | △               | —                      | □                                                                 | —          |            |                             |
|                        | EWJ/SWJ70           | ○            | ○              | —            | —          | —            | —          | ○                                  | —          | △               | —                      | □                                                                 | △          |            |                             |
|                        | EW/SW80             | —            | —              | ○            | ○          | ○            | ○          | ○                                  | ○          | —               | □                      | □                                                                 | △          |            |                             |
|                        | EW/SW100            | —            | —              | ○            | ○          | ○            | ○          | ○                                  | ○          | —               | □                      | □                                                                 | △          |            |                             |
|                        | EW/SW125            | —            | —              | ○            | ○          | ○            | ○          | ○                                  | ○          | —               | □                      | □                                                                 | △          |            |                             |
|                        | EW/SW150            | —            | —              | ○            | ○          | ○            | ○          | ○                                  | ○          | —               | □                      | □                                                                 | △          |            |                             |
|                        | EW/SW175            | —            | —              | ○            | ○          | ○            | ○          | ○                                  | ○          | —               | □                      | □                                                                 | —          |            |                             |
|                        | EW/SW200            | —            | —              | ○            | ○          | ○            | ○          | ○                                  | ○          | —               | □                      | □                                                                 | —          |            |                             |
| With motor             | SWJM35              | ○            | ○              | —            | —          | —            | —          | —                                  | —          | ○               | —                      | —                                                                 | —          |            |                             |
|                        | EWJM(R)/SWJM42      | ○            | ○              | —            | —          | —            | —          | —                                  | —          | ○               | —                      | —                                                                 | —          |            |                             |
|                        | EWJM(R)/SWJM(R)50   | ○            | ○              | —            | —          | —            | —          | ○                                  | —          | △               | —                      | □                                                                 | —          |            |                             |
|                        | EWJM(R)/SWJM(R)63   | ○            | ○              | —            | —          | —            | —          | ○                                  | —          | △               | —                      | □                                                                 | —          |            |                             |
|                        | EWJM(R)/SWJM(R)70   | ○            | ○              | —            | —          | —            | —          | ○                                  | —          | △               | —                      | □                                                                 | △          |            |                             |
|                        | EWM(R)/SWM(R)80     | —            | —              | ○            | ○          | ○            | ○          | ○                                  | ○          | —               | □                      | □                                                                 | △          |            |                             |
|                        | EWM(R)/SWM(R)100    | —            | —              | ○            | ○          | ○            | ○          | ○                                  | ○          | —               | □                      | □                                                                 | △          |            |                             |
|                        | EWM(R)/SWM(R)125    | —            | —              | ○            | ○          | ○            | ○          | ○                                  | ○          | —               | □                      | □                                                                 | △          |            |                             |
|                        | EWM(R)/SWM(R)150    | —            | —              | ○            | ○          | ○            | ○          | ○                                  | ○          | —               | □                      | □                                                                 | △          |            |                             |
|                        | EWM(R)/SWM(R)175    | —            | —              | □            | □          | □            | □          | □                                  | □          | —               | □                      | □                                                                 | —          |            |                             |
|                        | EWM(R)/SWM(R)200    | —            | —              | □            | □          | □            | □          | □                                  | □          | —               | □                      | □                                                                 | —          |            |                             |

○: Standard product △: Option □: Made to order.

## Motor Options

| Motor option | Description                                          |
|--------------|------------------------------------------------------|
| Z            | Inverter ready motors (0.4 kW or less)               |
| W            | Outdoor specification                                |
| V            | 400 V class <sup>3)</sup>                            |
| V1           | 380 V, 50 Hz (0.4 kW or less, 3.7 kW, 5.5 kW)        |
| V2           | 380 V, 60 Hz (0.4 kW or less)                        |
| V3           | 415 V, 50 Hz (0.4 kW or less)                        |
| V4           | 460 V, 60 Hz (0.4 kW or less)                        |
| N            | 200 V class CE compliant                             |
| N2           | 200 V class UL compliant                             |
| N3           | 200 V class CCC compliant                            |
| VN           | 400 V class CE compliant                             |
| VN2          | 400 V class UL compliant                             |
| VN3          | 400 V class CCC compliant                            |
| H            | Hard terminal box (0.4 kW or less)                   |
| Q            | Manual quick-release brake                           |
| M            | Manual shaft (motor fan cover side) (2.2 kW or less) |

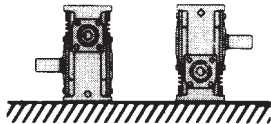
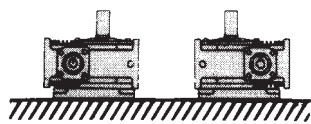
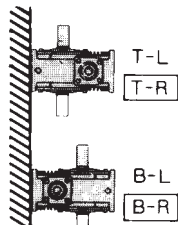
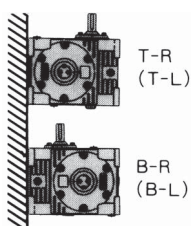
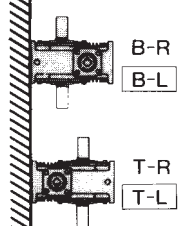
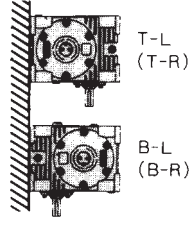
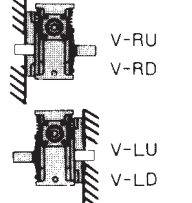
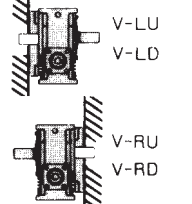
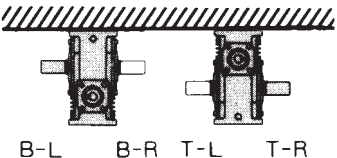
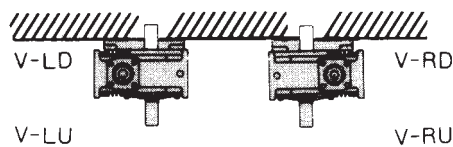
| (Without brake) |     |      |    |     | (With brake) |     |     |    |     |
|-----------------|-----|------|----|-----|--------------|-----|-----|----|-----|
| Z               | ZW  | ZWV  | V  | VN  | Z            | ZV  | ZVH | V1 | V1H |
|                 | ZV  | ZVH  |    | VN2 |              |     | ZVQ | V2 | V2H |
|                 | ZH  |      |    | VN3 |              |     | ZVM | V3 | V3H |
| W               | WV  |      |    | VH  |              | ZH  | ZHQ | V4 | V4H |
|                 | WV1 |      | V1 | V1H |              |     | ZHM | N  |     |
|                 | WV2 |      | V2 | V2H |              | ZQ  | ZQM | N2 |     |
|                 | WV3 |      | V3 | V3H |              | ZM  |     | N3 |     |
|                 | WV4 |      | V4 | V4H | V            | VN  |     | H  | HQ  |
|                 | WN  | WVN  | N  |     |              | VN3 |     |    | HQ  |
|                 | WN3 | WVN3 | N2 |     |              | VH  | VHQ | Q  | QM  |
|                 |     |      | N3 |     |              |     | VHM | M  |     |
|                 |     |      | H  |     |              | VQ  | VQM |    |     |
|                 |     |      |    |     |              | VM  |     |    |     |

- Note 1) Shaded options are for 0.2 kW and 0.4 kW motors.  
 2) 0.75 kW or larger brake motors for outdoor use are made to order.  
 Contact Tsubaki representatives for details.  
 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 |
| 3.7 to 5.5 kW without brake | 380/400/400/440 V | 50/60/60/60 Hz |
| with brake                  | 380/400/400/440 V | 50/50/60/60 Hz |

# Mounting Examples

## EW/EWM(R) Series

- Pressure vent and oil gauge positions will change when mounting EW sizes 80-200 on walls or ceilings. Make sure to specify the mounting method when ordering.
- The EWJ/EWJM(R) series may be mounted on any side.

|                   | Installation direction T/B type                                                                  |  | Installation direction V type                                                                  |  |
|-------------------|--------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------|--|
| Standard mounting |                 |  |             |  |
| Wall mount        | Ex. 1 Ex. 2<br> |  | Ex. 3<br>     |  |
|                   |               |  | Ex. 4<br>   |  |
|                   |                                                                                                  |  | Ex. 5<br>    |  |
|                   |                                                                                                  |  | Ex. 6<br>  |  |
| Ceiling mount     | Ex. 9<br>     |  | Ex. 10<br> |  |

## SW/SWM(R) Series

- Pressure vent and oil gauge positions will change depending on the mounting method of SW sizes 80 to 200. Make sure to specify the mounting method when ordering.
- The SWJ/SWJM(R) series may be mounted on any side.



## Motor and Reduction Ratio Combinations

- Output torque values are for motor speeds of 1450 r/min, 1750 r/min (50/60 Hz).
- Motor/reducer combinations shown are standard.
- Shaded boxes indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using. (Thermal rating factor is 1.0)
- Torque values may be lower if the ambient temperature is cold. Contact Tsubaki representative for further details.
- Refer to pages 17 to 18 for sizing.

### EWJM(R)/EWM(R) Series

| Efficiency class | With standard motor (IE1)                                    |               |         |        |               |         | With motor (IE3) |               |         |        |               |         |        |               |         |        |               |         |        |               |         |     |        |        |
|------------------|--------------------------------------------------------------|---------------|---------|--------|---------------|---------|------------------|---------------|---------|--------|---------------|---------|--------|---------------|---------|--------|---------------|---------|--------|---------------|---------|-----|--------|--------|
|                  | 0.2 kW                                                       |               |         | 0.4 kW |               |         | 0.75 kW          |               |         | 1.5 kW |               |         | 2.2 kW |               |         | 3.7 kW |               |         | 5.5 kW |               |         |     |        |        |
|                  | Size                                                         | Output torque |         | Size   | Output torque |         | Size             | Output torque |         | Size   | Output torque |         | Size   | Output torque |         | Size   | Output torque |         | Size   | Output torque |         |     |        |        |
|                  |                                                              | 50 Hz         | 60 Hz   |        | 50 Hz         | 60 Hz   |                  | 50 Hz         | 60 Hz   |        | 50 Hz         | 60 Hz   |        | 50 Hz         | 60 Hz   |        | 50 Hz         | 60 Hz   |        |               |         |     |        |        |
|                  |                                                              | N·m           | N·m     |        | N·m           | N·m     |                  | N·m           | N·m     |        | N·m           | N·m     |        | N·m           | N·m     |        | N·m           | N·m     |        |               |         |     |        |        |
|                  |                                                              | {kgf·m}       | {kgf·m} |        | {kgf·m}       | {kgf·m} |                  | {kgf·m}       | {kgf·m} |        | {kgf·m}       | {kgf·m} |        | {kgf·m}       | {kgf·m} |        | {kgf·m}       | {kgf·m} |        | {kgf·m}       | {kgf·m} |     |        |        |
| 10               | Select from the<br>Croise motor series.<br>Refer to page 194 |               |         |        |               |         | 50               | 44.0          | 37.0    | 63     | 90            | 75      | 70     | 132           | 110     | 80     | 224           | 187     | 100    | 337           | 281     |     |        |        |
|                  |                                                              |               |         |        |               |         |                  | {4.5}         | {3.8}   |        | {9.1}         | {7.6}   |        | {13.5}        | {11.2}  |        | {22.8}        | {19.1}  |        | {34.3}        | {28.6}  |     |        |        |
| 15               |                                                              |               |         |        |               |         | 42               | 32.2          | 27.0    | 50     | 64.0          | 53.0    | 63     | 129           | 108     | 70     | 191           | 160     | 80     | 325           | 272     | 100 | 491    | 410    |
|                  |                                                              |               |         |        |               |         |                  | {3.3}         | {2.8}   |        | {6.5}         | {5.5}   |        | {13.2}        | {11.0}  |        | {19.4}        | {16.3}  |        | {33.1}        | {27.7}  |     | {50.1} | {41.8} |
| 20               |                                                              |               |         |        |               |         | 42               | 40.8          | 34.4    | 50     | 83.0          | 69.0    | 63     | 167           | 140     | 70     | 247           | 207     | 80     | 412           | 353     | 100 | 637    | 533    |
|                  |                                                              | {4.2}         | {3.5}   |        | {8.4}         | {7.1}   |                  | {17.0}        | {14.3}  |        | {25.2}        | {21.1}  |        | {42.0}        | {36.0}  |        | {65.0}        | {54.4}  |        |               |         |     |        |        |
| 25               |                                                              | 42            | 49.2    | 41.5   | 50            | 100     | 84.0             | 63            | 196     | 171    | 80            | 305     | 256    | 100           | 525     | 440    | 125           | 791     | 662    |               |         |     |        |        |
|                  |                                                              |               | {5.0}   | {4.2}  |               | {10.2}  | {8.6}            |               | {20.0}  | {17.4} |               | {31.2}  | {26.2} |               | {53.6}  | {44.9} |               | {80.7}  | {67.6} |               |         |     |        |        |
| 30               |                                                              | 42            | 51.1    | 47.3   | 50            | 103     | 95               | 63            | 198     | 180    | 80            | 350     | 295    | 100           | 607     | 510    | 125           | 916     | 770    |               |         |     |        |        |
|                  |                                                              |               | {5.2}   | {4.8}  |               | {10.5}  | {9.7}            |               | {20.2}  | {18.4} |               | {35.7}  | {30.1} |               | {61.9}  | {52.1} |               | {93.5}  | {78.5} |               |         |     |        |        |
| 40               | 42                                                           | 34.1          | 29.0    | 50     | 76            | 65.0    | 63               | 145           | 123     | 80     | 302           | 256     | 100    | 457           | 386     | 125    | 792           | 667     | 150    | 1193          | 1003    |     |        |        |
|                  |                                                              | {3.5}         | {3.0}   |        | {7.8}         | {6.6}   |                  | {14.8}        | {12.6}  |        | {30.8}        | {26.1}  |        | {46.7}        | {39.4}  |        | {80.8}        | {68.0}  |        | {122}         | {102}   |     |        |        |
| 50               | 42                                                           | 40.0          | 34.2    | 50     | 90            | 76      | 63               | 174           | 147     | 80     | 362           | 307     | 100    | 552           | 467     | 125    | 949           | 802     | 150    | 1453          | 1225    |     |        |        |
|                  |                                                              | {4.1}         | {3.5}   |        | {9.2}         | {7.8}   |                  | {17.7}        | {15.0}  |        | {36.9}        | {31.3}  |        | {56.3}        | {47.6}  |        | {96.8}        | {81.8}  |        | {148}         | {125}   |     |        |        |
| 60               | 42                                                           | 45.2          | 38.8    | 50     | 92            | 86      | 63               | 177           | 163     | 80     | 376           | 342     | 100    | 628           | 543     | 125    | 1017          | 931     | 150    | 1561          | 1401    |     |        |        |
|                  |                                                              | {4.6}         | {4.0}   |        | {9.4}         | {8.8}   |                  | {18.1}        | {16.7}  |        | {38.4}        | {34.9}  |        | {64.1}        | {55.4}  |        | {104}         | {95.0}  |        | {159}         | {143}   |     |        |        |

### SWJM(R)/SWM(R) Series

| Efficiency class | With standard motor (IE1) |               |               |      |               |               | With motor (IE3) |               |                |      |               |               |      |               |               |      |               |               |     |               |               |
|------------------|---------------------------|---------------|---------------|------|---------------|---------------|------------------|---------------|----------------|------|---------------|---------------|------|---------------|---------------|------|---------------|---------------|-----|---------------|---------------|
|                  | 0.2 kW                    |               |               |      | 0.4 kW        |               | 0.75 kW          |               | 1.5 kW         |      |               | 2.2 kW        |      |               | 3.7 kW        |      |               | 5.5 kW        |     |               |               |
|                  | Size                      | Output torque |               | Size | Output torque |               | Size             | Output torque |                | Size | Output torque |               | Size | Output torque |               | Size | Output torque |               |     |               |               |
|                  |                           | 50 Hz         | 60 Hz         |      | 50 Hz         | 60 Hz         |                  | 50 Hz         | 60 Hz          |      | 50 Hz         | 60 Hz         |      | 50 Hz         | 60 Hz         |      |               |               |     |               |               |
|                  |                           | N·m           | N·m           |      | N·m           | N·m           |                  | N·m           | N·m            |      | N·m           | N·m           |      | N·m           | N·m           |      |               |               |     |               |               |
| (kgf·m)          |                           | (kgf·m)       | (kgf·m)       |      | (kgf·m)       | (kgf·m)       |                  | (kgf·m)       | (kgf·m)        |      | (kgf·m)       | (kgf·m)       |      | (kgf·m)       |               |      |               |               |     |               |               |
| 10               | 35                        | 11.2<br>{1.1} | 9.3<br>{1.0}  | 42   | 22.5<br>{2.3} | 18.8<br>{1.9} | 50               | 44<br>{4.5}   | 37<br>{3.8}    | 63   | 90.0<br>{9.1} | 75<br>{7.6}   | 70   | 132<br>{13.5} | 110<br>{11.2} | 80   | 224<br>{22.8} | 187<br>{19.1} | 100 | 337<br>{34.4} | 281<br>{28.6} |
| 15               | 35                        | 15.9<br>{1.6} | 13.4<br>{1.4} | 42   | 32.2<br>{3.3} | 27.0<br>{2.8} | 50               | 64<br>{6.5}   | 53<br>{5.5}    | 63   | 129<br>{13.2} | 108<br>{11.0} | *80  | 210<br>{21.4} | 250<br>{25.5} | 80   | 325<br>{33.1} | 272<br>{27.7} | 100 | 491<br>{50.1} | 410<br>{41.8} |
| 20               | 35                        | 20.1<br>{2.1} | 16.9<br>{1.7} | 42   | 40.8<br>{4.2} | 34.4<br>{3.5} | 63               | 83<br>{8.5}   | 70<br>{7.1}    | 70   | 168<br>{17.2} | 141<br>{14.4} | 80   | 250<br>{25.5} | 210<br>{21.4} | 80   | 412<br>{42.0} | 353<br>{36.0} | 100 | 637<br>{65.0} | 533<br>{54.4} |
| 25               | 35                        | 24.2<br>{2.5} | 20.4<br>{2.1} | 42   | 49.2<br>{5.0} | 41.5<br>{4.2} | 63               | 102<br>{10.4} | 85<br>{8.7}    | 70   | 205<br>{20.8} | 172<br>{17.6} | 80   | 305<br>{31.2} | 256<br>{26.2} | 100  | 525<br>{53.6} | 440<br>{44.9} | 125 | 791<br>{80.7} | 662<br>{67.6} |
| 30               | 42                        | 28.0<br>{2.9} | 23.7<br>{2.4} | 50   | 60<br>{6.6}   | 51<br>{5.2}   | 63               | 115<br>{11.8} | 98<br>{9.9}    | *80  | 184<br>{18.8} | 165<br>{16.8} | 80   | 350<br>{35.7} | 295<br>{30.1} | 100  | 607<br>{61.9} | 510<br>{52.1} | 125 | 916<br>{93.5} | 770<br>{78.5} |
| 40               | 42                        | 34.1<br>{3.5} | 29.0<br>{3.0} | 50   | 76<br>{7.8}   | 65<br>{6.6}   | 63               | 145<br>{14.8} | 123<br>{12.6}  | 80   | 302<br>{30.8} | 256<br>{26.1} | 100  | 457<br>{46.7} | 386<br>{39.4} | 125  | 792<br>{80.8} | 667<br>{68.0} | 150 | 1193<br>{122} | 1003<br>{102} |
| 50               | 42                        | 40.0<br>{4.1} | 39.2<br>{3.5} | 50   | 86<br>{8.8}   | 76<br>{7.8}   | 63               | 168<br>{17.1} | 147<br>{15.0}  | 80   | 362<br>{36.9} | 307<br>{31.3} | 100  | 552<br>{56.3} | 467<br>{47.6} | 125  | 949<br>{96.8} | 802<br>{81.8} | 150 | 1453<br>{145} | 1225<br>{125} |
| 60               | 42                        | 45.2<br>{4.6} | 38.8<br>{4.0} | 50   | 86<br>{8.7}   | 80<br>{8.2}   | 70               | 171<br>{17.5} | 15.8<br>{16.2} | 80   | 376<br>{38.4} | 342<br>{34.9} | 100  | 628<br>{64.1} | 543<br>{55.4} | 125  | 1017<br>{104} | 931<br>{95.0} | 150 | 1561<br>{159} | 1401<br>{143} |

\* Non-standard combination, contact Tsubaki representative.

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### Common for EWJ/EW/SWJ/SW Series

EWJ/EW/SWJ/SW Series

42 25/35

\_\_\_\_\_

## Common for EWJ/EW/SWJ/SW Series

|     |     |     |     |     |    |    |    |    |
|-----|-----|-----|-----|-----|----|----|----|----|
| 200 | 175 | 150 | 125 | 100 | 80 | 70 | 63 | 50 |
|-----|-----|-----|-----|-----|----|----|----|----|



## Sizing Chart (Sizing Table 3)

Transfer Capacity Table (EWJ25 to 70, SWJ25 to 70)

| Size           | Input           | 1750 r/min |                           | 1450 r/min |                           | 1150 r/min |                           | 950 r/min |                           | 500 r/min |                           | 100 r/min |                           |
|----------------|-----------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
|                | Reduction ratio | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} |
| EWJ25<br>SWJ25 | 10              | 0.27       | 12.4{1.26}                | 0.24       | 13.3{1.36}                | 0.22       | 14.8{1.51}                | 0.18      | 14.9{1.52}                | 0.10      | 14.9{1.52}                | 0.021     | 14.9{1.52}                |
|                | 15              | 0.20       | 12.9{1.31}                | 0.18       | 13.9{1.41}                | 0.16       | 14.9{1.52}                | 0.13      | 14.9{1.52}                | 0.07      | 14.9{1.52}                | 0.016     | 14.9{1.52}                |
|                | 20              | 0.16       | 13.5{1.38}                | 0.15       | 14.5{1.48}                | 0.12       | 14.9{1.52}                | 0.10      | 14.9{1.52}                | 0.06      | 14.9{1.52}                | 0.013     | 14.9{1.52}                |
|                | 25              | 0.14       | 13.9{1.42}                | 0.13       | 14.9{1.52}                | 0.10       | 14.9{1.52}                | 0.09      | 14.9{1.52}                | 0.05      | 14.9{1.52}                | 0.011     | 14.9{1.52}                |
|                | 30              | 0.12       | 13.6{1.39}                | 0.11       | 14.7{1.50}                | 0.09       | 14.9{1.52}                | 0.08      | 14.9{1.52}                | 0.04      | 14.9{1.52}                | 0.010     | 14.9{1.52}                |
|                | 40              | 0.10       | 13.9{1.42}                | 0.09       | 14.9{1.52}                | 0.08       | 14.9{1.52}                | 0.07      | 14.9{1.52}                | 0.04      | 14.9{1.52}                | 0.009     | 14.9{1.52}                |
|                | 50              | 0.09       | 13.9{1.42}                | 0.08       | 14.4{1.47}                | 0.07       | 14.9{1.52}                | 0.06      | 14.9{1.52}                | 0.03      | 14.9{1.52}                | 0.008     | 14.9{1.52}                |
| EWJ35<br>SWJ35 | 60              | 0.07       | 13.0{1.33}                | 0.06       | 13.5{1.37}                | 0.06       | 13.9{1.42}                | 0.05      | 14.3{1.46}                | 0.03      | 14.3{1.46}                | 0.007     | 14.3{1.46}                |
|                | 10              | 0.59       | 27.6{2.81}                | 0.53       | 29.7{3.03}                | 0.49       | 33.8{3.45}                | 0.44      | 36.5{3.73}                | 0.24      | 37.3{3.81}                | 0.053     | 37.3{3.81}                |
|                | 15              | 0.41       | 27.5{2.81}                | 0.37       | 29.7{3.03}                | 0.34       | 33.5{3.42}                | 0.32      | 37.7{3.85}                | 0.18      | 37.7{3.85}                | 0.039     | 37.7{3.85}                |
|                | 20              | 0.33       | 27.8{2.84}                | 0.30       | 30.0{3.06}                | 0.27       | 33.7{3.44}                | 0.26      | 37.7{3.85}                | 0.14      | 37.7{3.85}                | 0.032     | 37.7{3.85}                |
|                | 25              | 0.28       | 28.7{2.93}                | 0.26       | 31.0{3.16}                | 0.23       | 34.7{3.54}                | 0.21      | 37.7{3.85}                | 0.12      | 37.7{3.85}                | 0.027     | 37.7{3.85}                |
|                | 30              | 0.25       | 29.3{2.99}                | 0.23       | 31.6{3.22}                | 0.21       | 35.3{3.60}                | 0.19      | 37.7{3.85}                | 0.11      | 37.7{3.85}                | 0.025     | 37.7{3.85}                |
|                | 40              | 0.20       | 28.8{2.94}                | 0.19       | 31.1{3.18}                | 0.17       | 34.7{3.54}                | 0.16      | 37.7{3.85}                | 0.09      | 37.7{3.85}                | 0.022     | 37.7{3.85}                |
| EWJ42<br>SWJ42 | 50              | 0.18       | 29.6{3.02}                | 0.16       | 31.9{3.26}                | 0.15       | 35.5{3.63}                | 0.14      | 37.7{3.85}                | 0.08      | 37.7{3.85}                | 0.019     | 37.7{3.85}                |
|                | 60              | 0.16       | 29.5{3.01}                | 0.15       | 31.8{3.25}                | 0.14       | 35.3{3.61}                | 0.12      | 37.0{3.78}                | 0.07      | 37.0{3.78}                | 0.018     | 37.0{3.78}                |
|                | 10              | 0.87       | 41.1{4.20}                | 0.81       | 45.5{4.65}                | 0.73       | 51.3{5.23}                | 0.67      | 56.5{5.76}                | 0.45      | 68.8{7.02}                | 0.097     | 68.8{7.02}                |
|                | 15              | 0.67       | 45.2{4.61}                | 0.61       | 48.8{4.98}                | 0.55       | 55.0{5.62}                | 0.50      | 59.5{6.07}                | 0.32      | 68.9{7.03}                | 0.070     | 68.9{7.03}                |
|                | 20              | 0.54       | 46.3{4.73}                | 0.49       | 50.0{5.10}                | 0.45       | 56.1{5.73}                | 0.40      | 60.6{6.19}                | 0.26      | 69.0{7.04}                | 0.058     | 69.0{7.04}                |
|                | 25              | 0.46       | 47.8{4.88}                | 0.42       | 51.6{5.27}                | 0.38       | 57.8{5.90}                | 0.35      | 62.5{6.38}                | 0.22      | 69.0{7.04}                | 0.049     | 69.0{7.04}                |
|                | 30              | 0.40       | 47.3{4.83}                | 0.37       | 51.1{5.21}                | 0.33       | 57.0{5.82}                | 0.30      | 61.6{6.29}                | 0.19      | 69.0{7.04}                | 0.045     | 69.0{7.04}                |
| EWJ50<br>SWJ50 | 40              | 0.33       | 47.8{4.88}                | 0.30       | 51.6{5.27}                | 0.28       | 57.5{5.87}                | 0.25      | 62.1{6.34}                | 0.16      | 69.0{7.04}                | 0.039     | 69.0{7.04}                |
|                | 50              | 0.29       | 49.1{5.01}                | 0.26       | 53.0{5.40}                | 0.24       | 58.9{6.01}                | 0.22      | 63.6{6.49}                | 0.14      | 69.0{7.04}                | 0.034     | 69.0{7.04}                |
|                | 60              | 0.26       | 50.1{5.12}                | 0.24       | 54.1{5.52}                | 0.22       | 60.0{6.13}                | 0.20      | 63.2{6.45}                | 0.12      | 64.3{6.56}                | 0.029     | 64.3{6.56}                |
|                | 10              | 1.70       | 84{ 8.6}                  | 1.54       | 91{ 9.3}                  | 1.34       | 99{10.1}                  | 1.20      | 106{10.9}                 | 0.67      | 109{11.1}                 | 0.14      | 109{11.1}                 |
|                | 15              | 1.28       | 91{ 9.3}                  | 1.16       | 99{10.1}                  | 1.03       | 109{11.1}                 | 0.86      | 109{11.1}                 | 0.47      | 109{11.1}                 | 0.10      | 109{11.1}                 |
|                | 20              | 1.02       | 94{ 9.6}                  | 0.92       | 101{10.4}                 | 0.80       | 109{11.1}                 | 0.67      | 109{11.1}                 | 0.37      | 109{11.1}                 | 0.08      | 109{11.1}                 |
|                | 25              | 0.85       | 95{ 9.7}                  | 0.76       | 101{10.3}                 | 0.66       | 108{11.1}                 | 0.56      | 109{11.1}                 | 0.31      | 109{11.1}                 | 0.07      | 109{11.1}                 |
| SWJ50          | 30              | 0.75       | 95{ 9.7}                  | 0.68       | 103{10.5}                 | 0.59       | 109{11.1}                 | 0.50      | 109{11.1}                 | 0.28      | 109{11.1}                 | 0.07      | 109{11.1}                 |
|                | 40              | 0.59       | 94{ 9.6}                  | 0.53       | 101{10.3}                 | 0.47       | 108{11.1}                 | 0.40      | 109{11.1}                 | 0.22      | 109{11.1}                 | 0.05      | 109{11.1}                 |
|                | 50              | 0.48       | 91{ 9.3}                  | 0.43       | 98{10.0}                  | 0.38       | 104{10.6}                 | 0.34      | 109{11.1}                 | 0.19      | 109{11.1}                 | 0.05      | 109{11.1}                 |
|                | 60              | 0.40       | 86{ 8.8}                  | 0.36       | 92{ 9.4}                  | 0.32       | 98{10.0}                  | 0.28      | 103{10.5}                 | 0.17      | 106{10.8}                 | 0.04      | 106{10.8}                 |
|                | 10              | 1.56       | 77{ 7.9}                  | 1.40       | 83{ 8.5}                  | 1.28       | 94{ 9.6}                  | 1.15      | 102{10.4}                 | 0.67      | 109{11.1}                 | 0.14      | 109{11.1}                 |
|                | 15              | 1.13       | 81{ 8.2}                  | 1.02       | 87{ 8.9}                  | 0.89       | 94{ 9.6}                  | 0.78      | 99{10.1}                  | 0.47      | 109{11.1}                 | 0.10      | 109{11.1}                 |
|                | 20              | 0.91       | 84{ 8.6}                  | 0.82       | 91{ 9.2}                  | 0.71       | 97{ 9.9}                  | 0.63      | 102{10.4}                 | 0.37      | 109{11.1}                 | 0.08      | 109{11.1}                 |
| EWJ63<br>SWJ63 | 25              | 0.77       | 86{ 8.8}                  | 0.69       | 92{ 9.4}                  | 0.58       | 96{ 9.8}                  | 0.51      | 101{10.3}                 | 0.31      | 109{11.1}                 | 0.07      | 109{11.1}                 |
|                | 30              | 0.65       | 83{ 8.5}                  | 0.60       | 90{ 9.2}                  | 0.52       | 97{ 9.9}                  | 0.46      | 102{10.4}                 | 0.28      | 109{11.1}                 | 0.06      | 109{11.1}                 |
|                | 40              | 0.52       | 84{ 8.5}                  | 0.47       | 90{ 9.1}                  | 0.41       | 96{ 9.8}                  | 0.36      | 101{10.3}                 | 0.22      | 109{11.1}                 | 0.05      | 109{11.1}                 |
|                | 50              | 0.42       | 81{ 8.2}                  | 0.38       | 86{ 8.8}                  | 0.34       | 92{ 9.4}                  | 0.30      | 97{ 9.9}                  | 0.19      | 109{11.1}                 | 0.05      | 109{11.1}                 |
|                | 60              | 0.37       | 80{ 8.2}                  | 0.34       | 86{ 8.7}                  | 0.29       | 91{ 9.3}                  | 0.26      | 95{ 9.7}                  | 0.17      | 105{10.7}                 | 0.04      | 106{10.8}                 |
|                | 10              | 3.22       | 161{16.4}                 | 2.98       | 178{18.2}                 | 2.65       | 197{20.1}                 | 2.36      | 211{21.6}                 | 1.36      | 224{22.9}                 | 0.29      | 224{22.9}                 |
|                | 15              | 2.41       | 174{17.7}                 | 2.23       | 192{19.6}                 | 1.98       | 212{21.6}                 | 1.75      | 224{22.9}                 | 0.96      | 224{22.9}                 | 0.21      | 224{22.9}                 |
| SWJ63          | 20              | 1.91       | 179{18.2}                 | 1.76       | 196{20.0}                 | 1.56       | 215{22.0}                 | 1.36      | 224{22.9}                 | 0.75      | 224{22.9}                 | 0.17      | 224{22.9}                 |
|                | 25              | 1.57       | 179{18.3}                 | 1.44       | 196{20.0}                 | 1.27       | 213{21.7}                 | 1.12      | 224{22.9}                 | 0.62      | 224{22.9}                 | 0.14      | 224{22.9}                 |
|                | 30              | 1.38       | 180{18.4}                 | 1.29       | 198{20.2}                 | 1.15       | 218{22.3}                 | 1.00      | 224{22.9}                 | 0.56      | 224{22.9}                 | 0.13      | 224{22.9}                 |
|                | 40              | 1.09       | 178{18.2}                 | 1.01       | 196{20.0}                 | 0.91       | 215{21.9}                 | 0.80      | 224{22.9}                 | 0.46      | 224{22.9}                 | 0.11      | 224{22.9}                 |
|                | 50              | 0.88       | 173{17.7}                 | 0.81       | 188{19.2}                 | 0.73       | 205{20.9}                 | 0.65      | 217{22.1}                 | 0.39      | 224{22.9}                 | 0.09      | 224{22.9}                 |
|                | 60              | 0.72       | 163{16.7}                 | 0.67       | 177{18.1}                 | 0.59       | 192{19.6}                 | 0.53      | 203{20.7}                 | 0.31      | 204{20.8}                 | 0.07      | 204{20.8}                 |
|                | 10              | 2.70       | 135{13.7}                 | 2.43       | 145{14.8}                 | 2.20       | 164{16.8}                 | 1.99      | 178{18.1}                 | 1.36      | 224{22.9}                 | 0.29      | 224{22.9}                 |
| EWJ70<br>SWJ70 | 15              | 1.95       | 140{14.3}                 | 1.76       | 152{15.5}                 | 1.59       | 170{17.4}                 | 1.44      | 184{18.8}                 | 0.96      | 224{22.9}                 | 0.21      | 224{22.9}                 |
|                | 20              | 1.56       | 145{14.8}                 | 1.41       | 157{16.0}                 | 1.28       | 176{17.9}                 | 1.16      | 190{19.4}                 | 0.75      | 224{22.9}                 | 0.17      | 224{22.9}                 |
|                | 25              | 1.32       | 151{15.4}                 | 1.20       | 163{16.6}                 | 1.08       | 182{18.5}                 | 0.99      | 197{20.1}                 | 0.62      | 224{22.9}                 | 0.14      | 224{22.9}                 |
|                | 30              | 1.13       | 147{15.0}                 | 1.03       | 158{16.2}                 | 0.93       | 177{18.0}                 | 0.85      | 191{19.5}                 | 0.56      | 224{22.9}                 | 0.13      | 224{22.9}                 |
|                | 40              | 0.92       | 150{15.3}                 | 0.84       | 163{16.6}                 | 0.76       | 181{18.5}                 | 0.70      | 196{20.0}                 | 0.46      | 224{22.9}                 | 0.11      | 224{22.9}                 |
|                | 50              | 0.79       | 155{15.8}                 | 0.72       | 168{17.1}                 | 0.66       | 186{19.0}                 | 0.61      | 202{20.6}                 | 0.39      | 224{22.9}                 | 0.09      | 224{22.9}                 |
|                | 60              | 0.70       | 158{16.2}                 | 0.64       | 171{17.5}                 | 0.59       | 190{19.4}                 | 0.52      | 200{20.4}                 | 0.31      | 204{20.8}                 | 0.07      | 204{20.8}                 |
| SWJ70          | 10              | 4.28       | 214{21.9}                 | 3.85       | 231{23.6}                 | 3.51       | 263{26.8}                 | 3.16      | 284{29.0}                 | 1.96      | 324{33.1}                 | 0.42      | 324{33.1}                 |
|                | 15              | 3.09       | 225{22.9}                 | 2.80       | 242{24.7}                 | 2.54       | 273{27.9}                 | 2.29      | 295{30.1}                 | 1.38      | 324{33.1}                 | 0.30      | 324{33.1}                 |
|                | 20              | 2.50       | 235{24.0}                 | 2.26       | 254{25.9}                 | 2.05       | 285{29.1}                 | 1.86      | 309{31.5}                 | 1.08      | 324{33.1}                 | 0.24      | 324{33.1}                 |
|                | 25              | 2.12       | 243{24.8}                 | 1.92       | 263{26.8}                 | 1.74       | 294{30.0}                 | 1.56      | 314{32.0}                 | 0.89      | 324{33.1}                 | 0.20      | 324{33.1}                 |
|                | 30              | 1.80       | 236{24.0}                 | 1.64       | 255{26.0}                 | 1.49       | 284{29.0}                 | 1.36      | 308{31.4}                 | 0.81      | 324{33.1}                 | 0.19      | 324{33.1}                 |
|                | 40              | 1.45       | 241{24.6}                 | 1.35       | 265{27.0}                 | 1.22       | 295{30.1}                 | 1.11      | 315{32.2}                 | 0.65      | 324{33.1}                 | 0.15      | 324{33.1}                 |
|                | 50              | 1.18       | 235{23.9}                 | 1.10       | 258{26.3}                 | 0.99       | 283{28.9}                 | 0.89      | 302{30.8}                 | 0.55      | 324{33.1}                 | 0.13      | 324{33.1}                 |
| SWJ70          | 60              | 0.97       | 222{22.7}                 | 0.90       | 243{24.8}                 | 0.81       | 266{27.1}                 | 0.73      | 282{28.8}                 | 0.46      | 311{31.7}                 | 0.11      | 311{31.8}                 |
|                | 10              | 3.14       | 157{16.0}                 | 2.94       | 176{18.0}                 | 2.62       | 196{20.0}                 | 2.35      | 211{21.6}                 | 1.62      | 268{27.4}                 | 0.39      | 300{30.6}                 |
|                | 15              | 2.43       | 176{18.0}                 | 2.27       | 197{20.1}                 | 1.95       | 210{21.5}                 | 1.76      | 227{23.1}                 | 1.18      | 276{28.1}                 | 0.30      | 317{32.3}                 |
|                | 20              | 2.03       | 191{19.5}                 | 1.94       | 217{22.2}                 | 1.63       | 227{23.1}                 | 1.48      | 245{25.0}                 | 0.92      | 277{28.2}                 | 0.23      | 310{31.6}                 |
|                | 25              | 1.71       | 196{20.0}                 | 1.56       | 213{21.7}                 | 1.38       | 233{23.8}                 | 1.25      | 252{25.7}                 | 0.72      | 263{26.8}                 | 0.19      | 301{30.7}                 |
|                | 30              | 1.45       | 190{19.4}                 | 1.36       | 212{21.6}                 | 1.24       | 236{24.1}                 | 1.12      | 254{25.9}                 | 0.71      | 283{28.9}                 | 0.18      | 317{32.3}                 |
|                | 40              | 1.20       | 200{20.4}                 | 1.13       | 222{22.7}                 | 1.00       | 242{24.7}                 | 0.91      | 259{26.4}                 | 0.58      | 292{29.8}                 | 0.15      | 316{32.2}                 |
| SWJ70          | 50              | 0.97       | 194{19.8}                 | 0.91       | 214{21.8}                 | 0.81       | 233{23.7}                 | 0.73      | 248{25.3}                 | 0.46      | 273{27.9}                 | 0.12      | 294{30.0}                 |
|                | 60              | 0.80       | 184{18.8}                 | 0.75       | 201{20.6}                 | 0.66       | 218{22.3}                 | 0.60      | 232{23.6}                 | 0.38      | 253{25.9}                 | 0.10      | 276{28.2}                 |

When running a speed within the shaded boxes , and also continuously for more than one hour, refer to the thermal rating factor on page 17 to factor this into your selection.



# Sizing Chart (Sizing Table 3)

## Transfer Capacity Table (EW80 to 200, SW80 to 200)

| Size           | Input<br>Reduction<br>ratio | 1750 r/min  |                              | 1450 r/min  |                              | 1150 r/min  |                              | 950 r/min   |                              | 500 r/min   |                              | 100 r/min   |                              |
|----------------|-----------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|
|                |                             | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} |
| EW80<br>SW80   | 10                          | 6.52        | 329{33.6}                    | 6.16        | 372{38.0}                    | 5.52        | 417{42.5}                    | 4.86        | 441{45.0}                    | 2.83        | 474{48.3}                    | 0.61        | 474{48.3}                    |
|                | 15                          | 4.88        | 358{36.5}                    | 4.53        | 397{40.5}                    | 3.98        | 434{44.3}                    | 3.52        | 459{46.9}                    | 1.98        | 473{48.3}                    | 0.44        | 474{48.3}                    |
|                | 20                          | 3.88        | 370{37.7}                    | 3.62        | 412{42.0}                    | 3.18        | 449{45.8}                    | 2.80        | 473{48.3}                    | 1.55        | 473{48.3}                    | 0.34        | 473{48.3}                    |
|                | 25                          | 3.21        | 374{38.1}                    | 2.99        | 414{42.3}                    | 2.67        | 460{46.9}                    | 2.31        | 474{48.3}                    | 1.28        | 474{48.3}                    | 0.29        | 474{48.3}                    |
|                | 30                          | 2.77        | 371{37.9}                    | 2.62        | 416{42.4}                    | 2.30        | 451{46.0}                    | 2.03        | 474{48.3}                    | 1.14        | 474{48.3}                    | 0.27        | 474{48.3}                    |
|                | 40                          | 2.17        | 370{37.8}                    | 2.05        | 413{42.2}                    | 1.86        | 461{47.0}                    | 1.62        | 473{48.3}                    | 0.92        | 473{48.3}                    | 0.22        | 474{48.3}                    |
|                | 50                          | 1.76        | 361{36.8}                    | 1.66        | 400{40.8}                    | 1.50        | 443{45.2}                    | 1.36        | 473{48.3}                    | 0.78        | 474{48.3}                    | 0.19        | 474{48.3}                    |
|                | 60                          | 1.44        | 342{34.9}                    | 1.35        | 376{38.4}                    | 1.21        | 414{42.3}                    | 1.07        | 429{43.8}                    | 0.62        | 429{43.8}                    | 0.15        | 430{43.8}                    |
| EW100<br>SW100 | 10                          | 10.81       | 552{56.3}                    | 9.83        | 602{61.4}                    | 9.10        | 696{71.1}                    | 8.14        | 748{76.3}                    | 5.29        | 899{91.8}                    | 1.14        | 899{91.8}                    |
|                | 15                          | 8.05        | 600{61.2}                    | 7.37        | 657{67.1}                    | 6.66        | 741{75.6}                    | 5.88        | 784{80.0}                    | 3.68        | 900{91.8}                    | 0.81        | 900{91.8}                    |
|                | 20                          | 6.35        | 616{62.8}                    | 5.85        | 677{69.1}                    | 5.28        | 760{77.5}                    | 4.67        | 804{82.0}                    | 2.88        | 900{91.8}                    | 0.64        | 900{91.8}                    |
|                | 25                          | 5.06        | 603{61.5}                    | 4.81        | 683{69.7}                    | 4.39        | 774{79.0}                    | 3.91        | 822{83.9}                    | 2.16        | 822{83.9}                    | 0.49        | 822{83.9}                    |
|                | 30                          | 4.52        | 623{63.6}                    | 4.18        | 685{69.9}                    | 3.81        | 774{78.9}                    | 3.39        | 818{83.5}                    | 2.09        | 899{91.8}                    | 0.48        | 900{91.8}                    |
|                | 40                          | 3.52        | 618{63.1}                    | 3.27        | 680{69.4}                    | 3.04        | 778{79.4}                    | 2.74        | 829{84.6}                    | 1.68        | 900{91.8}                    | 0.40        | 900{91.8}                    |
|                | 50                          | 2.75        | 584{59.6}                    | 2.64        | 661{67.5}                    | 2.43        | 748{76.3}                    | 2.23        | 812{82.9}                    | 1.30        | 828{84.5}                    | 0.31        | 830{84.7}                    |
|                | 60                          | 2.27        | 559{57.1}                    | 2.16        | 628{64.1}                    | 1.98        | 705{72.0}                    | 1.72        | 722{73.6}                    | 0.98        | 719{73.4}                    | 0.24        | 720{73.5}                    |
| EW125<br>SW125 | 10                          | 17.70       | 909{92.7}                    | 16.42       | 1012{103}                    | 14.66       | 1130{115}                    | 13.80       | 1279{131}                    | 9.55        | 1637{167}                    | 2.14        | 1705{174}                    |
|                | 15                          | 13.13       | 987{101}                     | 12.20       | 1099{112}                    | 10.98       | 1233{126}                    | 10.32       | 1390{142}                    | 6.90        | 1704{174}                    | 1.52        | 1704{174}                    |
|                | 20                          | 10.27       | 1011{103}                    | 9.57        | 1126{115}                    | 8.69        | 1274{130}                    | 8.10        | 1420{145}                    | 5.33        | 1704{174}                    | 1.19        | 1704{174}                    |
|                | 25                          | 8.46        | 1020{104}                    | 7.64        | 1098{112}                    | 7.20        | 1286{131}                    | 6.70        | 1429{146}                    | 4.27        | 1648{168}                    | 0.96        | 1648{168}                    |
|                | 30                          | 7.33        | 1025{105}                    | 6.85        | 1141{117}                    | 6.23        | 1285{131}                    | 5.88        | 1444{147}                    | 3.88        | 1704{174}                    | 0.90        | 1705{174}                    |
|                | 40                          | 5.63        | 1015{104}                    | 5.28        | 1131{115}                    | 4.85        | 1281{131}                    | 4.55        | 1425{145}                    | 3.07        | 1705{174}                    | 0.73        | 1705{174}                    |
|                | 50                          | 4.55        | 986{101}                     | 4.15        | 1065{109}                    | 3.95        | 1245{127}                    | 3.71        | 1382{141}                    | 2.54        | 1656{169}                    | 0.62        | 1666{170}                    |
|                | 60                          | 3.72        | 936{95.5}                    | 3.42        | 1018{104}                    | 3.25        | 1182{121}                    | 3.04        | 1306{133}                    | 1.91        | 1430{146}                    | 0.47        | 1439{147}                    |
| EW150<br>SW150 | 10                          | 26.45       | 1364{139}                    | 24.52       | 1519{155}                    | 22.36       | 1734{177}                    | 20.31       | 1894{193}                    | 14.51       | 2508{256}                    | 3.29        | 2646{270}                    |
|                | 15                          | 19.58       | 1482{151}                    | 18.19       | 1650{168}                    | 16.62       | 1883{192}                    | 15.21       | 2068{211}                    | 10.41       | 2600{265}                    | 2.33        | 2646{270}                    |
|                | 20                          | 15.33       | 1519{155}                    | 14.26       | 1691{173}                    | 12.65       | 1869{191}                    | 12.05       | 2134{218}                    | 8.19        | 2646{270}                    | 1.83        | 2646{270}                    |
|                | 25                          | 12.45       | 1522{155}                    | 11.59       | 1695{173}                    | 10.48       | 1906{195}                    | 9.85        | 2143{219}                    | 6.69        | 2646{270}                    | 1.50        | 2646{270}                    |
|                | 30                          | 10.87       | 1539{157}                    | 10.15       | 1713{175}                    | 9.35        | 1956{200}                    | 8.31        | 2074{212}                    | 5.42        | 2421{247}                    | 1.38        | 2646{270}                    |
|                | 40                          | 8.36        | 1525{156}                    | 7.83        | 1698{173}                    | 7.03        | 1883{192}                    | 6.74        | 2144{219}                    | 4.69        | 2646{270}                    | 1.12        | 2646{270}                    |
|                | 50                          | 6.62        | 1474{151}                    | 6.21        | 1642{168}                    | 5.68        | 1849{189}                    | 5.38        | 2077{212}                    | 3.89        | 2646{270}                    | 0.93        | 2646{270}                    |
|                | 60                          | 5.43        | 1402{143}                    | 5.11        | 1561{159}                    | 4.69        | 1758{179}                    | 4.45        | 1974{201}                    | 3.31        | 2563{262}                    | 0.82        | 2586{264}                    |
| EW175<br>SW175 | 10                          | 37.09       | 1921{196}                    | 34.37       | 2139{218}                    | 30.78       | 2400{245}                    | 27.07       | 2539{259}                    | 17.86       | 3110{317}                    | 4.19        | 3395{347}                    |
|                | 15                          | 27.43       | 2088{213}                    | 25.06       | 2288{234}                    | 21.87       | 2496{255}                    | 19.27       | 2641{270}                    | 12.78       | 3223{329}                    | 2.96        | 3396{347}                    |
|                | 20                          | 21.44       | 2140{218}                    | 19.82       | 2370{242}                    | 17.27       | 2575{263}                    | 15.24       | 2725{278}                    | 10.15       | 3318{339}                    | 2.31        | 3396{347}                    |
|                | 25                          | 16.85       | 2068{211}                    | 15.68       | 2302{235}                    | 14.36       | 2625{268}                    | 12.70       | 2777{283}                    | 8.50        | 3378{345}                    | 1.93        | 3395{347}                    |
|                | 30                          | 15.16       | 2170{221}                    | 13.46       | 2300{235}                    | 11.63       | 2467{252}                    | 10.23       | 2589{264}                    | 6.66        | 3031{309}                    | 1.74        | 3396{347}                    |
|                | 40                          | 11.62       | 2149{219}                    | 10.87       | 2393{244}                    | 9.70        | 2640{269}                    | 8.62        | 2794{285}                    | 5.89        | 3390{346}                    | 1.40        | 3396{347}                    |
|                | 50                          | 8.93        | 2001{204}                    | 8.37        | 2228{227}                    | 7.75        | 2544{260}                    | 7.18        | 2795{285}                    | 4.95        | 3396{347}                    | 1.20        | 3396{347}                    |
|                | 60                          | 7.52        | 1973{201}                    | 7.06        | 2197{224}                    | 6.35        | 2428{248}                    | 6.12        | 2773{283}                    | 4.28        | 3396{347}                    | 1.05        | 3396{347}                    |
| EW200<br>SW200 | 10                          | 50.13       | 2597{265}                    | 46.43       | 2892{295}                    | 42.28       | 3301{337}                    | 39.17       | 3682{376}                    | 26.44       | 4613{471}                    | 7.05        | 5704{582}                    |
|                | 15                          | 36.95       | 2813{287}                    | 34.28       | 3132{320}                    | 31.29       | 3576{365}                    | 28.46       | 3907{399}                    | 18.91       | 4776{487}                    | 4.99        | 5703{582}                    |
|                | 20                          | 28.93       | 2888{295}                    | 26.88       | 3216{328}                    | 24.59       | 3671{375}                    | 22.49       | 4025{411}                    | 15.01       | 4910{501}                    | 3.92        | 5704{582}                    |
|                | 25                          | 22.86       | 2804{286}                    | 21.27       | 3122{319}                    | 19.49       | 3564{364}                    | 18.16       | 3975{406}                    | 12.56       | 4992{509}                    | 3.27        | 5704{582}                    |
|                | 30                          | 20.38       | 2916{298}                    | 19.00       | 3247{331}                    | 17.29       | 3671{375}                    | 15.21       | 3855{393}                    | 9.94        | 4526{462}                    | 2.95        | 5704{582}                    |
|                | 40                          | 15.67       | 2894{295}                    | 14.65       | 3223{329}                    | 13.51       | 3680{376}                    | 12.66       | 4105{419}                    | 8.71        | 5018{512}                    | 2.39        | 5703{582}                    |
|                | 50                          | 12.11       | 2709{276}                    | 11.35       | 3017{308}                    | 10.50       | 3444{352}                    | 9.87        | 3842{392}                    | 7.41        | 5073{518}                    | 2.06        | 5703{582}                    |
|                | 60                          | 10.15       | 2646{270}                    | 9.53        | 2947{301}                    | 8.85        | 3365{343}                    | 8.34        | 3754{383}                    | 6.55        | 5137{524}                    | 1.83        | 5703{582}                    |

When running a speed within the shaded boxes , and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.

## Technical Data

### ■ Actual Reduction Ratio

Reduction ratios for EWJ/EW/EWJM(R)/EWM(R)/SWJ/SW/SWJM(R)/SWM(R) series are all actual.

### ■ Allowable Loads on Shafts

#### 1. Solid output shaft Allowable radial load

##### EWJ/EW/EWJM(R)/EWM(R) Series

| Size                             | EWJ25       | EWJ35         | EWJ42         | EWJ50         | EWJ63         | EWJ70         | EW80          | EW100           | EW125           | EW150           | EW175           | EW200           |
|----------------------------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Allowable radial load<br>N {kgf} | 666<br>{68} | 1019<br>{104} | 1450<br>{148} | 2264<br>{231} | 2901<br>{296} | 3881<br>{396} | 7575<br>{773} | 11505<br>{1174} | 15131<br>{1544} | 21825<br>{2227} | 24451<br>{2495} | 29743<br>{3035} |

##### SW/SWM(R) Series (Shaft Arrangement: SLF/SRF)

| Size                             | SW80            | SW100           | SW125           | SW150           | SW175           | SW200           |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Allowable radial load<br>N {kgf} | 10427<br>{1064} | 11525<br>{1176} | 21184<br>{2162} | 22754<br>{2322} | 26558<br>{2710} | 29743<br>{3035} |

#### 2. Hollow output shaft Allowable radial load

##### EW/EWM(R) Series (Shaft Arrangement: H)

| Size  | Reduction ratio | Input speed |        |            |        |            |        |           |        |           |        |           |        |
|-------|-----------------|-------------|--------|------------|--------|------------|--------|-----------|--------|-----------|--------|-----------|--------|
|       |                 | 1750 r/min  |        | 1450 r/min |        | 1150 r/min |        | 950 r/min |        | 500 r/min |        | 100 r/min |        |
|       |                 | N           | {kgf}  | N          | {kgf}  | N          | {kgf}  | N         | {kgf}  | N         | {kgf}  | N         | {kgf}  |
| EW80  | 10              | 3383        | {345}  | 3464       | {353}  | 3661       | {374}  | 3916      | {400}  | 5258      | {537}  | 8310      | {848}  |
|       | 15              | 4192        | {428}  | 4390       | {448}  | 4707       | {480}  | 5027      | {513}  | 6719      | {686}  | 8310      | {848}  |
|       | 20              | 4841        | {494}  | 5076       | {518}  | 5457       | {557}  | 5833      | {595}  | 7787      | {795}  | 8310      | {848}  |
|       | 25              | 5403        | {551}  | 5664       | {578}  | 6078       | {620}  | 6556      | {669}  | 8661      | {884}  | 8310      | {848}  |
|       | 30              | 5889        | {601}  | 6193       | {632}  | 6677       | {681}  | 7144      | {729}  | 8310      | {848}  | 8310      | {848}  |
|       | 40              | 6724        | {686}  | 7061       | {721}  | 7590       | {774}  | 8173      | {834}  | 8310      | {848}  | 8310      | {848}  |
|       | 50              | 7463        | {762}  | 7866       | {803}  | 8310       | {848}  | 8310      | {848}  | 8310      | {848}  | 8310      | {848}  |
| EW100 | 60              | 8155        | {832}  | 8310       | {848}  | 8310       | {848}  | 8310      | {848}  | 8310      | {848}  | 8310      | {848}  |
|       | 10              | 4483        | {457}  | 4705       | {480}  | 4879       | {498}  | 5217      | {532}  | 6477      | {661}  | 9369      | {956}  |
|       | 15              | 5568        | {568}  | 5850       | {597}  | 6252       | {638}  | 6680      | {682}  | 8291      | {846}  | 9369      | {956}  |
|       | 20              | 6432        | {656}  | 6764       | {690}  | 7261       | {741}  | 7757      | {792}  | 9369      | {956}  | 9369      | {956}  |
|       | 25              | 7226        | {737}  | 7543       | {770}  | 8054       | {822}  | 8598      | {877}  | 9369      | {956}  | 9369      | {956}  |
|       | 30              | 7786        | {795}  | 8212       | {838}  | 8825       | {901}  | 9369      | {956}  | 9369      | {956}  | 9369      | {956}  |
|       | 40              | 8863        | {904}  | 9357       | {955}  | 9369       | {956}  | 9369      | {956}  | 9369      | {956}  | 9369      | {956}  |
| EW125 | 50              | 9369        | {956}  | 9369       | {956}  | 9369       | {956}  | 9369      | {956}  | 9369      | {956}  | 9369      | {956}  |
|       | 60              | 9369        | {956}  | 9369       | {956}  | 9369       | {956}  | 9369      | {956}  | 9369      | {956}  | 9369      | {956}  |
|       | 10              | 7715        | {787}  | 8025       | {819}  | 8503       | {868}  | 8740      | {892}  | 10585     | {1080} | 13083     | {1335} |
|       | 15              | 9500        | {969}  | 9932       | {1014} | 10547      | {1076} | 10983     | {1121} | 13083     | {1335} | 13083     | {1335} |
|       | 20              | 10913       | {1114} | 11440      | {1167} | 12146      | {1239} | 12715     | {1297} | 13083     | {1335} | 13083     | {1335} |
|       | 25              | 12126       | {1237} | 12860      | {1312} | 13083      | {1335} | 13083     | {1335} | 13083     | {1335} | 13083     | {1335} |
|       | 30              | 13083       | {1335} | 13083      | {1335} | 13083      | {1335} | 13083     | {1335} | 13083     | {1335} | 13083     | {1335} |
| EW150 | 40              | 13083       | {1335} | 13083      | {1335} | 13083      | {1335} | 13083     | {1335} | 13083     | {1335} | 13083     | {1335} |
|       | 50              | 13083       | {1335} | 13083      | {1335} | 13083      | {1335} | 13083     | {1335} | 13083     | {1335} | 13083     | {1335} |
|       | 60              | 13083       | {1335} | 13083      | {1335} | 13083      | {1335} | 13083     | {1335} | 13083     | {1335} | 13083     | {1335} |
|       | 10              | 6706        | {684}  | 6913       | {705}  | 7148       | {729}  | 7449      | {760}  | 8665      | {884}  | 19965     | {2037} |
|       | 15              | 8523        | {870}  | 8859       | {904}  | 9265       | {945}  | 9685      | {988}  | 11897     | {1214} | 24265     | {2476} |
|       | 20              | 9950        | {1015} | 10385      | {1060} | 11091      | {1132} | 11421     | {1165} | 14145     | {1443} | 24265     | {2476} |
|       | 25              | 11168       | {1140} | 11687      | {1193} | 12415      | {1267} | 12921     | {1319} | 16039     | {1637} | 24265     | {2476} |
| EW175 | 30              | 12195       | {1244} | 12787      | {1305} | 13541      | {1382} | 14512     | {1481} | 18306     | {1868} | 24265     | {2476} |
|       | 40              | 13982       | {1427} | 14697      | {1500} | 15748      | {1607} | 16433     | {1677} | 20444     | {2086} | 24265     | {2476} |
|       | 50              | 15573       | {1589} | 16402      | {1674} | 17528      | {1789} | 18415     | {1879} | 22705     | {2317} | 24265     | {2476} |
|       | 60              | 16989       | {1734} | 17921      | {1829} | 19181      | {1957} | 20196     | {2061} | 24265     | {2476} | 24265     | {2476} |
|       | 10              | 8504        | {868}  | 8770       | {895}  | 9229       | {942}  | 9866      | {1007} | 12232     | {1248} | 24451     | {2495} |
|       | 15              | 10827       | {1105} | 11386      | {1162} | 12224      | {1247} | 13057     | {1332} | 16214     | {1655} | 24451     | {2495} |
|       | 20              | 12635       | {1289} | 13264      | {1353} | 14276      | {1457} | 15247     | {1556} | 18942     | {1933} | 24451     | {2495} |
| EW200 | 25              | 14373       | {1467} | 15060      | {1537} | 15926      | {1625} | 17074     | {1742} | 21207     | {2164} | 24451     | {2495} |
|       | 30              | 15480       | {1580} | 16538      | {1688} | 17894      | {1826} | 19147     | {1954} | 24040     | {2453} | 24451     | {2495} |
|       | 40              | 17723       | {1808} | 18632      | {1901} | 20066      | {2048} | 21418     | {2185} | 24451     | {2495} | 24451     | {2495} |
|       | 50              | 19857       | {2026} | 20925      | {2135} | 22298      | {2275} | 23596     | {2408} | 24451     | {2495} | 24451     | {2495} |
|       | 60              | 21499       | {2194} | 22679      | {2314} | 24369      | {2487} | 24451     | {2495} | 24451     | {2495} | 24451     | {2495} |
|       | 10              | 10452       | {1067} | 10795      | {1101} | 11190      | {1142} | 11485     | {1172} | 14045     | {1433} | 29131     | {2973} |
|       | 15              | 13202       | {1347} | 13736      | {1402} | 14388      | {1468} | 15157     | {1547} | 18819     | {1920} | 35790     | {3652} |
|       | 20              | 15347       | {1566} | 16028      | {1636} | 16875      | {1722} | 17795     | {1816} | 22106     | {2256} | 35790     | {3652} |
|       | 25              | 17397       | {1775} | 18230      | {1860} | 19281      | {1967} | 20163     | {2057} | 24841     | {2535} | 35790     | {3652} |
|       | 30              | 18758       | {1914} | 19675      | {2008} | 20990      | {2142} | 22473     | {2293} | 28250     | {2883} | 35790     | {3652} |
|       | 40              | 21447       | {2189} | 22548      | {2301} | 23955      | {2444} | 25221     | {2574} | 31346     | {3199} | 35790     | {3652} |
|       | 50              | 23993       | {2448} | 25282      | {2580} | 26940      | {2749} | 28363     | {2894} | 34615     | {3532} | 35790     | {3652} |
|       | 60              | 26029       | {2656} | 27459      | {2802} | 29305      | {2990} | 30897     | {3153} | 35790     | {3652} | 35790     | {3652} |

## 2. Hollow output shaft Allowable radial load

## SWJ/SWJM(R)/SW/SWM(R) Series

| Size  | Reduction ratio | Input speed |        |            |        |            |        |           |        |           |        |           |        |
|-------|-----------------|-------------|--------|------------|--------|------------|--------|-----------|--------|-----------|--------|-----------|--------|
|       |                 | 1750 r/min  |        | 1450 r/min |        | 1150 r/min |        | 950 r/min |        | 500 r/min |        | 100 r/min |        |
|       |                 | N           | {kgf}  | N          | {kgf}  | N          | {kgf}  | N         | {kgf}  | N         | {kgf}  | N         | {kgf}  |
| SWJ25 | 10              | 701         | {72}   | 743        | {76}   | 793        | {81}   | 850       | {87}   | 850       | {87}   | 850       | {87}   |
|       | 30              | 850         | {87}   | 850        | {87}   | 850        | {87}   | 850       | {87}   | 850       | {87}   | 850       | {87}   |
|       | 60              | 850         | {87}   | 850        | {87}   | 850        | {87}   | 850       | {87}   | 850       | {87}   | 850       | {87}   |
| SWJ35 | 10              | 1468        | {150}  | 1553       | {158}  | 1653       | {169}  | 1742      | {178}  | 2131      | {217}  | 2391      | {244}  |
|       | 30              | 2226        | {227}  | 2342       | {239}  | 2391       | {244}  | 2391      | {244}  | 2391      | {244}  | 2391      | {244}  |
|       | 60              | 2391        | {244}  | 2391       | {244}  | 2391       | {244}  | 2391      | {244}  | 2391      | {244}  | 2391      | {244}  |
| SWJ42 | 10              | 1782        | {182}  | 1878       | {192}  | 2005       | {205}  | 2113      | {216}  | 2529      | {258}  | 3783      | {386}  |
|       | 30              | 2681        | {274}  | 2845       | {290}  | 3055       | {312}  | 3230      | {330}  | 3783      | {386}  | 3783      | {386}  |
|       | 60              | 3428        | {350}  | 3634       | {371}  | 3783       | {386}  | 3783      | {386}  | 3783      | {386}  | 3783      | {386}  |
| SWJ50 | 10              | 2267        | {231}  | 2405       | {245}  | 2565       | {262}  | 2722      | {278}  | 3305      | {337}  | 5517      | {563}  |
|       | 30              | 3514        | {359}  | 3733       | {381}  | 4011       | {409}  | 4263      | {435}  | 5262      | {537}  | 5517      | {563}  |
|       | 60              | 4603        | {470}  | 4892       | {499}  | 5268       | {538}  | 5517      | {563}  | 5517      | {563}  | 5517      | {563}  |
| SWJ63 | 10              | 2304        | {235}  | 2426       | {248}  | 2570       | {262}  | 2700      | {276}  | 3153      | {322}  | 6505      | {664}  |
|       | 30              | 3595        | {367}  | 3811       | {389}  | 4080       | {416}  | 4328      | {442}  | 5404      | {551}  | 7066      | {721}  |
|       | 60              | 4771        | {487}  | 5062       | {517}  | 5437       | {555}  | 5864      | {598}  | 7066      | {721}  | 7066      | {721}  |
| SWJ70 | 10              | 2607        | {266}  | 2711       | {277}  | 2854       | {291}  | 2985      | {305}  | 3591      | {366}  | 6990      | {713}  |
|       | 30              | 4119        | {420}  | 4337       | {443}  | 4617       | {471}  | 4878      | {498}  | 6103      | {623}  | 9320      | {951}  |
|       | 60              | 5499        | {561}  | 5832       | {595}  | 6290       | {642}  | 6704      | {684}  | 8385      | {856}  | 9320      | {951}  |
| SW80  | 10              | 3383        | {345}  | 3464       | {353}  | 3661       | {374}  | 3916      | {400}  | 5258      | {537}  | 10956     | {1118} |
|       | 15              | 4192        | {428}  | 4390       | {448}  | 4707       | {480}  | 5027      | {513}  | 6719      | {686}  | 13274     | {1354} |
|       | 20              | 4841        | {494}  | 5076       | {518}  | 5457       | {557}  | 5833      | {595}  | 7787      | {795}  | 15011     | {1532} |
|       | 25              | 5403        | {551}  | 5664       | {578}  | 6078       | {620}  | 6556      | {669}  | 8661      | {884}  | 15513     | {1583} |
|       | 30              | 5889        | {601}  | 6193       | {632}  | 6677       | {681}  | 7144      | {729}  | 9389      | {958}  | 15513     | {1583} |
|       | 40              | 6724        | {686}  | 7061       | {721}  | 7590       | {774}  | 8173      | {834}  | 10643     | {1086} | 15513     | {1583} |
|       | 50              | 7463        | {762}  | 7866       | {803}  | 8439       | {861}  | 9028      | {921}  | 11693     | {1193} | 15513     | {1583} |
| SW100 | 10              | 4106        | {419}  | 4292       | {438}  | 4388       | {448}  | 4661      | {476}  | 5856      | {598}  | 13136     | {1340} |
|       | 15              | 5199        | {531}  | 5443       | {555}  | 5759       | {588}  | 6154      | {628}  | 7899      | {806}  | 16280     | {1661} |
|       | 20              | 6070        | {619}  | 6365       | {649}  | 6778       | {692}  | 7239      | {739}  | 9334      | {952}  | 17199     | {1755} |
|       | 25              | 6882        | {702}  | 7150       | {730}  | 7567       | {772}  | 8087      | {825}  | 10793     | {1101} | 17199     | {1755} |
|       | 30              | 7432        | {758}  | 7820       | {798}  | 8345       | {852}  | 8911      | {909}  | 11457     | {1169} | 17199     | {1755} |
|       | 40              | 8514        | {869}  | 8970       | {915}  | 9541       | {974}  | 10184     | {1039} | 13077     | {1334} | 17199     | {1755} |
|       | 50              | 9544        | {974}  | 10004      | {1021} | 10667      | {1088} | 11299     | {1153} | 14715     | {1502} | 17199     | {1755} |
| SW125 | 10              | 7715        | {787}  | 8025       | {819}  | 8503       | {868}  | 8740      | {892}  | 10585     | {1080} | 22485     | {2294} |
|       | 15              | 9500        | {969}  | 9932       | {1014} | 10547      | {1076} | 10983     | {1121} | 13710     | {1399} | 27605     | {2817} |
|       | 20              | 10913       | {1114} | 11440      | {1167} | 12146      | {1239} | 12715     | {1297} | 16022     | {1635} | 28763     | {2935} |
|       | 25              | 12126       | {1237} | 12860      | {1312} | 13548      | {1382} | 14229     | {1452} | 18015     | {1838} | 28763     | {2935} |
|       | 30              | 13144       | {1341} | 13824      | {1411} | 14752      | {1505} | 15504     | {1582} | 19539     | {1994} | 28763     | {2935} |
|       | 40              | 14936       | {1524} | 15738      | {1606} | 16802      | {1715} | 17704     | {1807} | 22240     | {2269} | 28763     | {2935} |
|       | 50              | 16477       | {1681} | 17489      | {1785} | 18588      | {1897} | 19625     | {2003} | 24524     | {2502} | 28763     | {2935} |
| SW150 | 10              | 17897       | {1826} | 18981      | {1937} | 20241      | {2065} | 21417     | {2185} | 27148     | {2770} | 28763     | {2935} |
|       | 15              | 6706        | {684}  | 6913       | {705}  | 7148       | {729}  | 7449      | {760}  | 8665      | {884}  | 19965     | {2037} |
|       | 20              | 8523        | {870}  | 8859       | {904}  | 9265       | {945}  | 9685      | {988}  | 11897     | {1214} | 25303     | {2582} |
|       | 25              | 9950        | {1015} | 10385      | {1060} | 11091      | {1132} | 11421     | {1165} | 14145     | {1443} | 29111     | {2970} |
|       | 30              | 11168       | {1140} | 11687      | {1193} | 12415      | {1267} | 12921     | {1319} | 16039     | {1637} | 32180     | {3284} |
|       | 40              | 12195       | {1244} | 12787      | {1305} | 13541      | {1382} | 14512     | {1481} | 18306     | {1868} | 34936     | {3565} |
|       | 50              | 13982       | {1427} | 14697      | {1500} | 15748      | {1607} | 16433     | {1677} | 20444     | {2086} | 36231     | {3697} |
| SW175 | 10              | 15573       | {1589} | 16402      | {1674} | 17528      | {1789} | 18415     | {1879} | 22705     | {2317} | 36231     | {3697} |
|       | 15              | 16989       | {1734} | 17921      | {1829} | 19181      | {1957} | 20196     | {2061} | 24727     | {2523} | 36231     | {3697} |
|       | 20              | 8504        | {868}  | 8770       | {895}  | 9229       | {942}  | 9866      | {1007} | 12232     | {1248} | 26211     | {2675} |
|       | 25              | 10827       | {1105} | 11386      | {1162} | 12224      | {1247} | 13057     | {1332} | 16214     | {1655} | 32851     | {3352} |
|       | 30              | 12635       | {1289} | 13264      | {1353} | 14276      | {1457} | 15247     | {1556} | 18942     | {1933} | 37597     | {3836} |
|       | 40              | 14373       | {1467} | 15060      | {1537} | 15926      | {1625} | 17074     | {1742} | 21207     | {2164} | 41498     | {4235} |
|       | 50              | 15480       | {1580} | 16538      | {1688} | 17894      | {1826} | 19147     | {1954} | 24040     | {2453} | 44873     | {4579} |
| SW200 | 10              | 17723       | {1808} | 18632      | {1901} | 20066      | {2048} | 21418     | {2185} | 26611     | {2715} | 47785     | {4876} |
|       | 15              | 19857       | {2026} | 20925      | {2135} | 22298      | {2275} | 23596     | {2408} | 29387     | {2999} | 47785     | {4876} |
|       | 20              | 21499       | {2194} | 22679      | {2314} | 24369      | {2487} | 25569     | {2609} | 31814     | {3246} | 47785     | {4876} |
|       | 25              | 10452       | {1067} | 10795      | {1101} | 11190      | {1142} | 11485     | {1172} | 14045     | {1433} | 29131     | {2973} |
|       | 30              | 13202       | {1347} | 13736      | {1402} | 14388      | {1468} | 15157     | {1547} | 18819     | {1920} | 37348     | {3811} |
|       | 40              | 15347       | {1566} | 16028      | {1636} | 16875      | {1722} | 17795     | {1816} | 22106     | {2256} | 43175     | {4406} |
|       | 50              | 17397       | {1775} | 18230      | {1860} | 19281      | {1967} | 20163     | {2057} | 24841     | {2535} | 47945     | {4892} |
| SW200 | 10              | 18758       | {1914} | 19675      | {2008} | 20990      | {2142} | 22473     | {2293} | 28250     | {2883} | 52064     | {5313} |
|       | 15              | 21447       | {2189} | 22548      | {2301} | 23955      | {2444} | 25221     | {2574} | 31346     | {3199} | 55272     | {5640} |
|       | 20              | 23993       | {2448} | 25282      | {2580} | 26940      | {2749} | 28363     | {2894} | 34615     | {3532} | 55272     | {5640} |
|       | 25              | 26029       | {2656} | 27459      | {2802} | 29305      | {2990} | 30897     | {3153} | 37462     | {3823} | 55272     | {5640} |
|       | 30              |             |        |            |        |            |        |           |        |           |        |           |        |

## Technical Data

### 3. Hollow output shaft Allowable axial load

#### EW/EWM(R) Series (Shaft Arrangement: H)

| Size  | Reduction ratio | Input speed |        |            |        |            |        |           |        |           |        |           |        |
|-------|-----------------|-------------|--------|------------|--------|------------|--------|-----------|--------|-----------|--------|-----------|--------|
|       |                 | 1750 r/min  |        | 1450 r/min |        | 1150 r/min |        | 950 r/min |        | 500 r/min |        | 100 r/min |        |
|       |                 | N           | {kgf}  | N          | {kgf}  | N          | {kgf}  | N         | {kgf}  | N         | {kgf}  | N         | {kgf}  |
| EW80  | 10              | 4729        | {483}  | 4851       | {495}  | 5224       | {533}  | 5748      | {587}  | 8757      | {894}  | 11593     | {1183} |
|       | 15              | 6963        | {711}  | 7423       | {757}  | 8161       | {833}  | 8911      | {909}  | 11593     | {1183} | 11593     | {1183} |
|       | 20              | 8632        | {881}  | 9223       | {941}  | 10165      | {1037} | 11095     | {1132} | 11593     | {1183} | 11593     | {1183} |
|       | 25              | 10050       | {1025} | 10739      | {1096} | 11593      | {1183} | 11593     | {1183} | 11593     | {1183} | 11593     | {1183} |
|       | 30              | 11449       | {1168} | 11593      | {1183} | 11593      | {1183} | 11593     | {1183} | 11593     | {1183} | 11593     | {1183} |
|       | 40              | 11593       | {1183} | 11593      | {1183} | 11593      | {1183} | 11593     | {1183} | 11593     | {1183} | 11593     | {1183} |
|       | 50              | 11593       | {1183} | 11593      | {1183} | 11593      | {1183} | 11593     | {1183} | 11593     | {1183} | 11593     | {1183} |
|       | 60              | 11593       | {1183} | 11593      | {1183} | 11593      | {1183} | 11593     | {1183} | 11593     | {1183} | 11593     | {1183} |
| EW100 | 10              | 6009        | {613}  | 6410       | {654}  | 6682       | {682}  | 7352      | {750}  | 9965      | {1017} | 15572     | {1589} |
|       | 15              | 8834        | {901}  | 9451       | {964}  | 10346      | {1056} | 11304     | {1154} | 15100     | {1541} | 15572     | {1589} |
|       | 20              | 11013       | {1124} | 11804      | {1204} | 12983      | {1325} | 14162     | {1445} | 15572     | {1589} | 15572     | {1589} |
|       | 25              | 12874       | {1314} | 13691      | {1397} | 14970      | {1528} | 15572     | {1589} | 15572     | {1589} | 15572     | {1589} |
|       | 30              | 14440       | {1474} | 15532      | {1585} | 15572      | {1589} | 15572     | {1589} | 15572     | {1589} | 15572     | {1589} |
|       | 40              | 15572       | {1589} | 15572      | {1589} | 15572      | {1589} | 15572     | {1589} | 15572     | {1589} | 15572     | {1589} |
|       | 50              | 15572       | {1589} | 15572      | {1589} | 15572      | {1589} | 15572     | {1589} | 15572     | {1589} | 15572     | {1589} |
|       | 60              | 15572       | {1589} | 15572      | {1589} | 15572      | {1589} | 15572     | {1589} | 15572     | {1589} | 15572     | {1589} |
| EW125 | 10              | 10598       | {1081} | 11149      | {1138} | 12050      | {1230} | 12449     | {1270} | 16238     | {1657} | 25833     | {2636} |
|       | 15              | 15145       | {1545} | 16108      | {1644} | 17495      | {1785} | 18524     | {1890} | 24919     | {2543} | 25833     | {2636} |
|       | 20              | 18511       | {1889} | 19768      | {2017} | 21477      | {2192} | 22908     | {2338} | 25833     | {2636} | 25833     | {2636} |
|       | 25              | 21497       | {2194} | 23253      | {2373} | 25075      | {2559} | 25833     | {2636} | 25833     | {2636} | 25833     | {2636} |
|       | 30              | 24213       | {2471} | 25833      | {2636} | 25833      | {2636} | 25833     | {2636} | 25833     | {2636} | 25833     | {2636} |
|       | 40              | 25833       | {2636} | 25833      | {2636} | 25833      | {2636} | 25833     | {2636} | 25833     | {2636} | 25833     | {2636} |
|       | 50              | 25833       | {2636} | 25833      | {2636} | 25833      | {2636} | 25833     | {2636} | 25833     | {2636} | 25833     | {2636} |
|       | 60              | 25833       | {2636} | 25833      | {2636} | 25833      | {2636} | 25833     | {2636} | 25833     | {2636} | 25833     | {2636} |
| EW150 | 10              | 8983        | {917}  | 9318       | {951}  | 9686       | {988}  | 10236     | {1044} | 12613     | {1287} | 37818     | {3859} |
|       | 15              | 13886       | {1417} | 14671      | {1497} | 15650      | {1597} | 16661     | {1700} | 22055     | {2251} | 37818     | {3859} |
|       | 20              | 17493       | {1785} | 18598      | {1898} | 20355      | {2077} | 21329     | {2176} | 28365     | {2894} | 37818     | {3859} |
|       | 25              | 20419       | {2084} | 21779      | {2222} | 23695      | {2418} | 25136     | {2565} | 33441     | {3412} | 37818     | {3859} |
|       | 30              | 23490       | {2397} | 25136      | {2565} | 27298      | {2785} | 29829     | {3044} | 37818     | {2859} | 37818     | {3859} |
|       | 40              | 27994       | {2857} | 30035      | {3065} | 32979      | {3365} | 35163     | {3588} | 37818     | {3859} | 37818     | {3859} |
|       | 50              | 31912       | {3256} | 34298      | {3500} | 37568      | {3833} | 37818     | {3859} | 37818     | {3859} | 37818     | {3859} |
|       | 60              | 35555       | {3628} | 37818      | {3859} | 37818      | {3859} | 37818     | {3859} | 37818     | {3859} | 37818     | {3859} |
| EW175 | 10              | 11295       | {1153} | 11732      | {1197} | 12567      | {1282} | 13849     | {1413} | 18849     | {1923} | 47638     | {4861} |
|       | 15              | 17406       | {1776} | 18668      | {1905} | 20575      | {2100} | 22493     | {2295} | 30125     | {3074} | 47638     | {4861} |
|       | 20              | 21896       | {2234} | 23434      | {2391} | 25877      | {2640} | 28238     | {2881} | 37663     | {3843} | 47638     | {4861} |
|       | 25              | 26113       | {2665} | 27900      | {2847} | 30225      | {3084} | 33085     | {3376} | 44010     | {4491} | 47638     | {4861} |
|       | 30              | 29355       | {2995} | 31983      | {3264} | 35450      | {3617} | 38686     | {3948} | 47638     | {4861} | 47638     | {4861} |
|       | 40              | 34933       | {3565} | 37488      | {3825} | 41361      | {4220} | 45011     | {4593} | 47638     | {4861} | 47638     | {4861} |
|       | 50              | 40145       | {4096} | 43176      | {4406} | 47188      | {4815} | 47638     | {4861} | 47638     | {4861} | 47638     | {4861} |
|       | 60              | 44302       | {4521} | 47638      | {4861} | 47638      | {4861} | 47638     | {4861} | 47638     | {4861} | 47638     | {4861} |
| EW200 | 10              | 13789       | {1407} | 14377      | {1467} | 15056      | {1536} | 15558     | {1588} | 20761     | {2118} | 56379     | {5753} |
|       | 15              | 20769       | {2119} | 21993      | {2244} | 23536      | {2402} | 25311     | {2583} | 33902     | {3459} | 56379     | {5753} |
|       | 20              | 25924       | {2645} | 27603      | {2817} | 29762      | {3037} | 32035     | {3269} | 42722     | {4359} | 56379     | {5753} |
|       | 25              | 30728       | {3136} | 32849      | {3352} | 35610      | {3634} | 38006     | {3878} | 50135     | {5116} | 56379     | {5753} |
|       | 30              | 34491       | {3520} | 36938      | {3769} | 40411      | {4124} | 44120     | {4502} | 56379     | {5753} | 56379     | {5753} |
|       | 40              | 40950       | {4179} | 43958      | {4486} | 47920      | {4890} | 51525     | {5258} | 56379     | {5735} | 56379     | {5753} |
|       | 50              | 46951       | {4791} | 50503      | {5153} | 55206      | {5633} | 56379     | {5753} | 56379     | {5753} | 56379     | {5753} |
|       | 60              | 51932       | {5299} | 55922      | {5706} | 56379      | {5753} | 56379     | {5753} | 56379     | {5753} | 56379     | {5753} |



## 3. Hollow output shaft Allowable axial load

## SWJ/SWJM(R)/SW/SWM(R) Series

| Size  | Reduction ratio | Input speed |        |            |        |            |        |           |        |           |        |           |        |
|-------|-----------------|-------------|--------|------------|--------|------------|--------|-----------|--------|-----------|--------|-----------|--------|
|       |                 | 1750 r/min  |        | 1450 r/min |        | 1150 r/min |        | 950 r/min |        | 500 r/min |        | 100 r/min |        |
|       |                 | N           | {kgf}  | N          | {kgf}  | N          | {kgf}  | N         | {kgf}  | N         | {kgf}  | N         | {kgf}  |
| SWJ25 | 10              | 1093        | {112}  | 1180       | {120}  | 1287       | {131}  | 1443      | {147}  | 1838      | {188}  | 1838      | {188}  |
|       | 30              | 1838        | {188}  | 1838       | {188}  | 1838       | {188}  | 1838      | {188}  | 1838      | {188}  | 1838      | {188}  |
|       | 60              | 1838        | {188}  | 1838       | {188}  | 1838       | {188}  | 1838      | {188}  | 1838      | {188}  | 1838      | {188}  |
| SWJ35 | 10              | 2787        | {284}  | 3005       | {307}  | 3263       | {333}  | 3501      | {357}  | 4141      | {423}  | 4141      | {423}  |
|       | 30              | 4141        | {423}  | 4141       | {423}  | 4141       | {423}  | 4141      | {423}  | 4141      | {423}  | 4141      | {423}  |
|       | 60              | 4141        | {423}  | 4141       | {423}  | 4141       | {423}  | 4141      | {423}  | 4141      | {423}  | 4141      | {423}  |
| SWJ42 | 10              | 3449        | {352}  | 3698       | {377}  | 4034       | {412}  | 4329      | {442}  | 5505      | {562}  | 5733      | {585}  |
|       | 30              | 5733        | {585}  | 5733       | {585}  | 5733       | {585}  | 5733      | {585}  | 5733      | {585}  | 5733      | {585}  |
|       | 60              | 5733        | {585}  | 5733       | {585}  | 5733       | {585}  | 5733      | {585}  | 5733      | {585}  | 5733      | {585}  |
| SWJ50 | 10              | 3643        | {372}  | 3940       | {402}  | 4291       | {438}  | 4645      | {474}  | 6016      | {614}  | 7546      | {770}  |
|       | 30              | 6845        | {698}  | 7410       | {756}  | 7546       | {770}  | 7546      | {770}  | 7546      | {770}  | 7546      | {770}  |
|       | 60              | 7546        | {770}  | 7546       | {770}  | 7546       | {770}  | 7546      | {770}  | 7546      | {770}  | 7546      | {770}  |
| SWJ63 | 10              | 4148        | {423}  | 4443       | {453}  | 4798       | {490}  | 5126      | {523}  | 6252      | {638}  | 8281      | {845}  |
|       | 30              | 7512        | {767}  | 8099       | {826}  | 8281       | {845}  | 8281      | {845}  | 8281      | {845}  | 8281      | {845}  |
|       | 60              | 8281        | {845}  | 8281       | {845}  | 8281       | {845}  | 8281      | {845}  | 8281      | {845}  | 8281      | {845}  |
| SWJ70 | 10              | 4846        | {494}  | 5107       | {521}  | 5474       | {559}  | 5818      | {594}  | 7475      | {763}  | 11613     | {1185} |
|       | 30              | 9409        | {960}  | 10107      | {1031} | 11031      | {1126} | 11613     | {1185} | 11613     | {1185} | 11613     | {1185} |
|       | 60              | 11613       | {1185} | 11613      | {1185} | 11613      | {1185} | 11613     | {1185} | 11613     | {1185} | 11613     | {1185} |
| SW80  | 10              | 4729        | {483}  | 4851       | {495}  | 5224       | {533}  | 5748      | {587}  | 8757      | {894}  | 13217     | {1349} |
|       | 15              | 6963        | {711}  | 7423       | {757}  | 8161       | {833}  | 8911      | {909}  | 12984     | {1325} | 14190     | {1448} |
|       | 20              | 8632        | {881}  | 9223       | {941}  | 10165      | {1037} | 11095     | {1132} | 14793     | {1509} | 15482     | {1488} |
|       | 25              | 10050       | {1025} | 10739      | {1096} | 11806      | {1205} | 13000     | {1327} | 15011     | {1532} | 14808     | {1511} |
|       | 30              | 11449       | {1168} | 12284      | {1254} | 13563      | {1384} | 14794     | {1510} | 15356     | {1567} | 15146     | {1546} |
|       | 40              | 13579       | {1386} | 14553      | {1485} | 15673      | {1599} | 15626     | {1595} | 15544     | {1586} | 15339     | {1565} |
|       | 50              | 15451       | {1577} | 15899      | {1622} | 15793      | {1612} | 15731     | {1605} | 15651     | {1597} | 15453     | {1577} |
| SW100 | 10              | 5189        | {529}  | 5502       | {561}  | 5594       | {571}  | 6102      | {623}  | 8515      | {869}  | 20964     | {2139} |
|       | 15              | 8101        | {827}  | 8635       | {881}  | 9339       | {953}  | 10217     | {1043} | 14258     | {1455} | 21560     | {2200} |
|       | 20              | 10331       | {1054} | 11039      | {1126} | 12042      | {1229} | 13138     | {1341} | 18234     | {1861} | 21560     | {2200} |
|       | 25              | 12232       | {1248} | 12949      | {1321} | 14033      | {1432} | 15309     | {1562} | 21560     | {2200} | 21560     | {2200} |
|       | 30              | 13815       | {1410} | 14830      | {1513} | 16219      | {1655} | 17663     | {1802} | 21560     | {2200} | 21560     | {2200} |
|       | 40              | 16521       | {1686} | 17760      | {1812} | 19371      | {1977} | 21077     | {2151} | 21560     | {2200} | 21560     | {2200} |
|       | 50              | 18962       | {1935} | 20295      | {2071} | 21560      | {2200} | 21560     | {2200} | 21560     | {2200} | 21560     | {2200} |
| SW125 | 10              | 10598       | {1081} | 11149      | {1138} | 12050      | {1230} | 12449     | {1270} | 16238     | {1657} | 30488     | {3111} |
|       | 15              | 15145       | {1545} | 16108      | {1644} | 17495      | {1785} | 18524     | {1890} | 24919     | {2543} | 32787     | {3346} |
|       | 20              | 18511       | {1889} | 19768      | {2017} | 21477      | {2192} | 22908     | {2338} | 31008     | {3164} | 33615     | {3430} |
|       | 25              | 21497       | {2194} | 23253      | {2373} | 25075      | {2559} | 26857     | {2741} | 34822     | {3553} | 34348     | {3505} |
|       | 30              | 24213       | {2471} | 25979      | {2651} | 28410      | {2899} | 30473     | {3109} | 35522     | {3625} | 35053     | {3577} |
|       | 40              | 28527       | {2911} | 30668      | {3129} | 33558      | {3424} | 36087     | {3682} | 35921     | {3665} | 35464     | {3619} |
|       | 50              | 32330       | {3299} | 34989      | {3570} | 36505      | {3725} | 36505     | {3725} | 36278     | {3702} | 35829     | {3656} |
| SW150 | 10              | 8983        | {917}  | 9318       | {951}  | 9686       | {988}  | 10236     | {1044} | 12613     | {1287} | 16089     | {1642} |
|       | 15              | 13886       | {1417} | 14671      | {1497} | 15650      | {1597} | 16661     | {1700} | 19897     | {2030} | 19105     | {1949} |
|       | 20              | 17493       | {1785} | 18598      | {1898} | 20355      | {2077} | 21329     | {2176} | 20914     | {2134} | 20283     | {2070} |
|       | 25              | 20419       | {2084} | 21779      | {2222} | 22945      | {2341} | 22465     | {2292} | 21372     | {2181} | 20762     | {2119} |
|       | 30              | 23490       | {2397} | 24185      | {2468} | 23828      | {2431} | 23663     | {2415} | 23011     | {2348} | 22077     | {2253} |
|       | 40              | 24782       | {2529} | 24569      | {2507} | 24324      | {2482} | 23989     | {2448} | 23261     | {2374} | 22657     | {2312} |
|       | 50              | 24960       | {2547} | 24767      | {2527} | 24515      | {2501} | 24236     | {2473} | 23479     | {2396} | 22893     | {2336} |
| SW175 | 10              | 11295       | {1153} | 11732      | {1197} | 12567      | {1282} | 13849     | {1413} | 18849     | {1923} | 26945     | {2749} |
|       | 15              | 17406       | {1776} | 18668      | {1905} | 20575      | {2100} | 22493     | {2295} | 30125     | {3074} | 30319     | {3094} |
|       | 20              | 21896       | {2234} | 23434      | {2391} | 25877      | {2640} | 28238     | {2881} | 32465     | {3313} | 31634     | {3228} |
|       | 25              | 26113       | {2665} | 27900      | {2847} | 30225      | {3084} | 33085     | {3376} | 33208     | {3389} | 32508     | {3317} |
|       | 30              | 29355       | {2995} | 31983      | {3264} | 35450      | {3617} | 35456     | {3618} | 34756     | {3546} | 33645     | {3433} |
|       | 40              | 34933       | {3565} | 36177      | {3692} | 35932      | {3666} | 35744     | {3647} | 34957     | {3567} | 34291     | {3499} |
|       | 50              | 36818       | {3757} | 36608      | {3736} | 36306      | {3705} | 36061     | {3680} | 35373     | {3609} | 34723     | {3543} |
| SW200 | 10              | 13789       | {1407} | 14377      | {1467} | 15056      | {1536} | 15558     | {1588} | 20761     | {2118} | 22785     | {2325} |
|       | 15              | 20769       | {2119} | 21993      | {2244} | 23536      | {2402} | 25311     | {2583} | 30020     | {3063} | 27350     | {2791} |
|       | 20              | 25924       | {2645} | 27603      | {2817} | 29762      | {3037} | 32035     | {3269} | 31325     | {3196} | 29171     | {2977} |
|       | 25              | 30728       | {3136} | 32849      | {3352} | 34204      | {3490} | 33663     | {3435} | 32237     | {3289} | 30367     | {3099} |
|       | 30              | 34491       | {3520} | 35464      | {3619} | 35066      | {3578} | 34852     | {3556} | 33993     | {3469} | 31861     | {3251} |
|       | 40              | 36262       | {3700} | 35987      | {3672} | 35591      | {3632} | 35238     | {3596} | 34291     | {3499} | 32756     | {3342} |
|       | 50              | 36677       | {3743} | 36451      | {3719} | 36123      | {3686} | 35807     | {3654} | 34763     | {3547} | 33347     | {3403} |
|       | 60              | 36913       | {3767} | 36714      | {3746} | 36425      | {3717} | 36144     | {3688} | 35098     | {3581} | 33781     | {3447} |



## Technical Data

### ■ EWJ/EW/SWJ/SW Worm Starting Efficiency (Reference)

| Size           | Reduction ratio | Starting efficiency | Size           | Reduction ratio | Starting efficiency | Size           | Reduction ratio | Starting efficiency | Size           | Reduction ratio | Starting efficiency |
|----------------|-----------------|---------------------|----------------|-----------------|---------------------|----------------|-----------------|---------------------|----------------|-----------------|---------------------|
| EWJ25<br>SWJ25 | 10              | 62%                 | EWJ50<br>SWJ50 | 10              | 64%                 | EW80<br>SW80   | 10              | 65%                 | EW150<br>SW150 | 10              | 66%                 |
|                | 15              | 52%                 |                | 15              | 57%                 |                | 15              | 57%                 |                | 15              | 59%                 |
|                | 20              | 48%                 |                | 20              | 53%                 |                | 20              | 53%                 |                | 20              | 55%                 |
|                | 25              | 45%                 |                | 25              | 49%                 |                | 25              | 50%                 |                | 25              | 53%                 |
|                | 30              | 39%                 |                | 30              | 41%                 |                | 30              | 42%                 |                | 30              | 44%                 |
|                | 40              | 33%                 |                | 40              | 37%                 |                | 40              | 37%                 |                | 40              | 39%                 |
|                | 50              | 29%                 |                | 50              | 33%                 |                | 50              | 34%                 |                | 50              | 37%                 |
|                | 60              | 27%                 |                | 60              | 30%                 |                | 60              | 32%                 |                | 60              | 33%                 |
| EWJ35<br>SWJ35 | 10              | 61%                 | EWJ63<br>SWJ63 | 10              | 64%                 | EW100<br>SW100 | 10              | 66%                 | EW175<br>SW175 | 10              | 66%                 |
|                | 15              | 54%                 |                | 15              | 56%                 |                | 15              | 59%                 |                | 15              | 59%                 |
|                | 20              | 47%                 |                | 20              | 52%                 |                | 20              | 54%                 |                | 20              | 55%                 |
|                | 25              | 43%                 |                | 25              | 49%                 |                | 25              | 51%                 |                | 25              | 51%                 |
|                | 30              | 39%                 |                | 30              | 41%                 |                | 30              | 44%                 |                | 30              | 44%                 |
|                | 40              | 31%                 |                | 40              | 36%                 |                | 40              | 38%                 |                | 40              | 39%                 |
|                | 50              | 28%                 |                | 50              | 33%                 |                | 50              | 35%                 |                | 50              | 36%                 |
|                | 60              | 24%                 |                | 60              | 31%                 |                | 60              | 33%                 |                | 60              | 33%                 |
| EWJ42<br>SWJ42 | 10              | 61%                 | EWJ70<br>SWJ70 | 10              | 63%                 | EW125<br>SW125 | 10              | 66%                 | EW200<br>SW200 | 10              | 65%                 |
|                | 15              | 54%                 |                | 15              | 56%                 |                | 15              | 59%                 |                | 15              | 58%                 |
|                | 20              | 47%                 |                | 20              | 52%                 |                | 20              | 55%                 |                | 20              | 53%                 |
|                | 25              | 44%                 |                | 25              | 48%                 |                | 25              | 51%                 |                | 25              | 49%                 |
|                | 30              | 38%                 |                | 30              | 40%                 |                | 30              | 44%                 |                | 30              | 42%                 |
|                | 40              | 32%                 |                | 40              | 36%                 |                | 40              | 39%                 |                | 40              | 37%                 |
|                | 50              | 29%                 |                | 50              | 33%                 |                | 50              | 35%                 |                | 50              | 33%                 |
|                | 60              | 26%                 |                | 60              | 30%                 |                | 60              | 32%                 |                | 60              | 30%                 |

Note) Starting efficiencies are from a standstill speed of 0 r/min. Starting a reducer requires a higher amount of power than during normal operation. Use the values given above for reference. Refer to the "Catalogue efficiency" and its calculation on page 18 for normal operation.

### ■ Moment of Inertia on Input Shaft (Solid Output Shaft / Hollow Output Shaft)

#### EWJ/EW Series

Moment of inertia on input shaft  $\{GD^2\} : \times 10^{-3} \text{ kg} \cdot \text{m}^2 \{ \times 10^{-3} \text{ kgf} \cdot \text{m}^2 \}$

| Size<br>Reduction ratio | EWJ25           | EWJ35          | EWJ42          | EWJ50          | EWJ63         | EWJ70         | EW80         | EW100        | EW125         | EW150         | EW175          | EW200           |
|-------------------------|-----------------|----------------|----------------|----------------|---------------|---------------|--------------|--------------|---------------|---------------|----------------|-----------------|
| 10                      | 0.005<br>{0.02} | 0.01<br>{0.06} | 0.02<br>{0.10} | 0.17<br>{0.67} | 0.38<br>{1.5} | 0.64<br>{2.5} | 0.8<br>{3.4} | 2.1<br>{8.3} | 4.6<br>{18.3} | 9.2<br>{36.8} | 16.7<br>{67.0} | 29.1<br>{116.6} |
| 15                      | 0.005<br>{0.02} | 0.01<br>{0.06} | 0.02<br>{0.09} | 0.16<br>{0.65} | 0.36<br>{1.4} | 0.61<br>{2.5} | 0.8<br>{3.1} | 1.9<br>{7.6} | 4.1<br>{16.3} | 8.1<br>{32.4} | 14.4<br>{57.5} | 24.4<br>{97.8}  |
| 20                      | 0.005<br>{0.02} | 0.01<br>{0.05} | 0.02<br>{0.09} | 0.15<br>{0.62} | 0.34<br>{1.4} | 0.57<br>{2.3} | 0.7<br>{2.9} | 1.8<br>{7.1} | 3.5<br>{14.0} | 6.7<br>{27.0} | 11.5<br>{46.2} | 21.5<br>{86.0}  |
| 25                      | 0.005<br>{0.02} | 0.01<br>{0.05} | 0.02<br>{0.08} | 0.15<br>{0.60} | 0.33<br>{1.3} | 0.55<br>{2.2} | 0.7<br>{2.7} | 1.7<br>{6.7} | 3.3<br>{13.1} | 6.0<br>{23.9} | 10.2<br>{40.9} | 19.8<br>{79.4}  |
| 30                      | 0.005<br>{0.02} | 0.01<br>{0.05} | 0.02<br>{0.08} | 0.16<br>{0.63} | 0.35<br>{1.4} | 0.60<br>{2.4} | 0.7<br>{3.0} | 1.8<br>{7.2} | 3.8<br>{15.1} | 7.4<br>{29.8} | 13.0<br>{51.9} | 21.6<br>{86.5}  |
| 40                      | 0.005<br>{0.02} | 0.01<br>{0.05} | 0.02<br>{0.08} | 0.15<br>{0.61} | 0.34<br>{1.3} | 0.57<br>{2.3} | 0.7<br>{2.8} | 1.7<br>{6.8} | 3.3<br>{13.3} | 6.4<br>{25.5} | 10.7<br>{43.0} | 19.9<br>{79.7}  |
| 50                      | 0.005<br>{0.02} | 0.01<br>{0.05} | 0.02<br>{0.08} | 0.15<br>{0.60} | 0.33<br>{1.3} | 0.55<br>{2.2} | 0.7<br>{2.7} | 1.6<br>{6.5} | 3.2<br>{12.7} | 5.7<br>{22.9} | 9.8<br>{39.1}  | 19.0<br>{76.0}  |
| 60                      | 0.004<br>{0.02} | 0.01<br>{0.05} | 0.02<br>{0.08} | 0.15<br>{0.60} | 0.32<br>{1.3} | 0.54<br>{2.2} | 0.6<br>{2.5} | 1.5<br>{6.2} | 3.1<br>{12.3} | 5.6<br>{22.2} | 9.1<br>{36.4}  | 18.6<br>{74.3}  |

# **■ Moment of Inertia on Input Shaft (Solid Output Shaft / Hollow Output Shaft)**

## **EWJM(R)/EWM(R) Series**

Moment of inertia on input shaft  $\{GD^2\} : \times 10^{-3} \text{ kg} \cdot \text{m}^2 \{ \times 10^{-3} \text{ kgf} \cdot \text{m}^2 \}$

| Size<br>Reduction ratio | EWJM42      |                                        | EWJM50      |                                        | EWJM63      |                                        | EWJM70      |                                        | EWM80       |                                        | EWM100      |                                        | EWM125      |                                        | EWM150      |                                        |
|-------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|
|                         | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft |
| 10                      | 0.75        | 2.3<br>{9.3}                           | 0.75        | 2.4<br>{9.6}                           | 1.5         | 6.9<br>{27.7}                          | 2.2         | 9.9<br>{39.6}                          | 3.7         | 21.3<br>{85.0}                         | 5.5         | 40.4<br>{161.4}                        | —           | —                                      | —           | —                                      |
| 15                      | 0.4         | 1.0<br>{4.2}                           | 0.75        | 2.4<br>{9.6}                           | 1.5         | 6.9<br>{27.6}                          | 2.2         | 9.9<br>{39.54}                         | 3.7         | 21.3<br>{85.0}                         | 5.5         | 40.4<br>{161.4}                        | —           | —                                      | —           | —                                      |
| 20                      | 0.4         | 1.0<br>{4.2}                           | 0.75        | 2.4<br>{9.6}                           | 1.5         | 6.9<br>{27.5}                          | 2.2         | 9.8<br>{39.34}                         | 3.7         | 21.3<br>{85.0}                         | 5.5         | 40.1<br>{160.4}                        | —           | —                                      | —           | —                                      |
| 25                      | 0.4         | 1.0<br>{4.2}                           | 0.75        | 2.4<br>{9.6}                           | 1.5         | 6.9<br>{27.5}                          | 1.5         | 7.1<br>{28.4}                          | 2.2         | 10.0<br>{40.0}                         | 3.7         | 22.3<br>{89.0}                         | 5.5         | 41.7<br>{166.6}                        | —           | —                                      |
| 30                      | 0.4         | 1.0<br>{4.2}                           | 0.75        | 2.4<br>{9.6}                           | 1.5         | 6.9<br>{27.6}                          | 1.5         | 7.2<br>{28.6}                          | 2.2         | 10.0<br>{40.0}                         | 3.7         | 22.3<br>{89.0}                         | 5.5         | 42.2<br>{168.6}                        | —           | —                                      |
| 40                      | 0.2         | 0.5<br>{2.0}                           | 0.4         | 1.1<br>{4.5}                           | 0.75        | 2.6<br>{10.3}                          | 0.75        | 2.8<br>{11.2}                          | 1.5         | 7.2<br>{28.8}                          | 2.2         | 11.0<br>{44.04}                        | 3.7         | 23.8<br>{95.0}                         | 5.5         | 44.7<br>{178.6}                        |
| 50                      | 0.2         | 0.5<br>{2.0}                           | 0.4         | 1.1<br>{4.5}                           | 0.75        | 2.6<br>{10.2}                          | 0.75        | 2.8<br>{11.1}                          | 1.5         | 7.2<br>{28.8}                          | 2.2         | 11.0<br>{44.04}                        | 3.7         | 23.8<br>{95.0}                         | 5.5         | 44.2<br>{176.6}                        |
| 60                      | 0.2         | 0.5<br>{2.0}                           | 0.4         | 1.1<br>{4.5}                           | 0.75        | 2.6<br>{10.2}                          | 0.75        | 2.8<br>{11.1}                          | 1.5         | 7.2<br>{28.8}                          | 2.2         | 10.8<br>{43.04}                        | 3.7         | 23.5<br>{94.0}                         | 5.5         | 43.9<br>{175.6}                        |

\* For motors with brakes, add the moment of inertia and  $GD^2$  listed in the Brake Characteristics table on page 222.

## **SWJ/SW Series**

Moment of inertia on input shaft  $\{GD^2\} : \times 10^{-3} \text{ kg} \cdot \text{m}^2 \{ \times 10^{-3} \text{ kgf} \cdot \text{m}^2 \}$

| Size<br>Reduction ratio | SWJ25           | SWJ35                                  | SWJ42          | SWJ50                                  | SWJ63         | SWJ70                                  | SW80         | SW100                                  | SW125         | SW150                                  | SW175          | SW200                                  |
|-------------------------|-----------------|----------------------------------------|----------------|----------------------------------------|---------------|----------------------------------------|--------------|----------------------------------------|---------------|----------------------------------------|----------------|----------------------------------------|
|                         | Motor<br>kW     | Moment of<br>inertia on<br>input shaft | Motor<br>kW    | Moment of<br>inertia on<br>input shaft | Motor<br>kW   | Moment of<br>inertia on<br>input shaft | Motor<br>kW  | Moment of<br>inertia on<br>input shaft | Motor<br>kW   | Moment of<br>inertia on<br>input shaft | Motor<br>kW    | Moment of<br>inertia on<br>input shaft |
| 10                      | 0.005<br>{0.02} | 0.02<br>{0.06}                         | 0.03<br>{0.11} | 0.09<br>{0.37}                         | 0.38<br>{1.5} | 0.33<br>{1.3}                          | 0.8<br>{3.4} | 2.1<br>{8.3}                           | 4.6<br>{18.3} | 9.2<br>{36.8}                          | 16.7<br>{67.0} | 29.1<br>{116.6}                        |
| 15                      | 0.005<br>{0.02} | 0.01<br>{0.06}                         | 0.02<br>{0.09} | 0.09<br>{0.35}                         | 0.36<br>{1.4} | 0.30<br>{1.2}                          | 0.8<br>{3.1} | 1.9<br>{7.6}                           | 4.1<br>{16.3} | 8.1<br>{32.4}                          | 14.4<br>{57.5} | 24.4<br>{97.8}                         |
| 20                      | 0.005<br>{0.02} | 0.01<br>{0.05}                         | 0.02<br>{0.09} | 0.08<br>{0.31}                         | 0.34<br>{1.4} | 0.29<br>{1.2}                          | 0.7<br>{2.9} | 1.8<br>{7.1}                           | 3.5<br>{14.0} | 6.7<br>{27.0}                          | 11.5<br>{46.2} | 21.5<br>{86.0}                         |
| 25                      | 0.005<br>{0.02} | 0.01<br>{0.05}                         | 0.02<br>{0.08} | 0.08<br>{0.30}                         | 0.33<br>{1.3} | 0.26<br>{1.0}                          | 0.7<br>{2.7} | 1.7<br>{6.7}                           | 3.3<br>{13.1} | 6.0<br>{23.9}                          | 10.2<br>{40.9} | 19.8<br>{79.4}                         |
| 30                      | 0.005<br>{0.02} | 0.01<br>{0.05}                         | 0.02<br>{0.08} | 0.08<br>{0.33}                         | 0.35<br>{1.4} | 0.28<br>{1.1}                          | 0.7<br>{3.0} | 1.8<br>{7.2}                           | 3.8<br>{15.1} | 7.4<br>{29.8}                          | 13.0<br>{51.9} | 21.6<br>{86.5}                         |
| 40                      | 0.005<br>{0.02} | 0.01<br>{0.05}                         | 0.02<br>{0.08} | 0.08<br>{0.31}                         | 0.34<br>{1.3} | 0.29<br>{1.1}                          | 0.7<br>{2.8} | 1.7<br>{6.8}                           | 3.3<br>{13.3} | 6.4<br>{25.5}                          | 10.7<br>{43.0} | 19.9<br>{79.7}                         |
| 50                      | 0.005<br>{0.02} | 0.01<br>{0.05}                         | 0.02<br>{0.08} | 0.07<br>{0.30}                         | 0.33<br>{1.3} | 0.25<br>{1.0}                          | 0.7<br>{2.7} | 1.6<br>{6.5}                           | 3.2<br>{12.7} | 5.7<br>{22.9}                          | 9.8<br>{39.1}  | 19.0<br>{76.0}                         |
| 60                      | 0.004<br>{0.02} | 0.01<br>{0.05}                         | 0.02<br>{0.08} | 0.07<br>{0.29}                         | 0.32<br>{1.3} | 0.23<br>{0.9}                          | 0.6<br>{2.5} | 1.5<br>{6.2}                           | 3.1<br>{12.3} | 5.6<br>{22.2}                          | 9.1<br>{36.4}  | 18.6<br>{74.3}                         |

## **SWJM(R)/SWM(R) Series**

Moment of inertia on input shaft  $\{GD^2\} : \times 10^{-3} \text{ kg} \cdot \text{m}^2 \{ \times 10^{-3} \text{ kgf} \cdot \text{m}^2 \}$

| Size<br>Reduction ratio | SWJM35      |                                        | SWJM42      |                                        | SWJM50      |                                        | SWJM63      |                                        | SWJM70      |                                        | SWM80       |                                        | SWM100      |                                        | SWM125      |                                        | SWM150      |                                        |
|-------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|-------------|----------------------------------------|
|                         | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft | Motor<br>kW | Moment of<br>inertia on<br>input shaft |
| 10                      | 0.2         | 0.5<br>{1.9}                           | 0.4         | 1.1<br>{4.2}                           | 0.75        | 2.6<br>{16.5}                          | 1.5         | 7.2<br>{28.9}                          | 2.2         | 10.4<br>{41.6}                         | 3.7         | 21.3<br>{85.0}                         | 5.5         | 40.4<br>{161.6}                        | —           | —                                      | —           | —                                      |
| 15                      | 0.2         | 0.5<br>{1.9}                           | 0.4         | 1.0<br>{4.2}                           | 0.75        | 2.6<br>{16.5}                          | 1.5         | 4.5<br>{28.9}                          | 1.5         | 7.1<br>{28.6}                          | 3.7         | 21.3<br>{85.0}                         | 5.5         | 40.4<br>{161.6}                        | —           | —                                      | —           | —                                      |
| 20                      | 0.2         | 0.5<br>{1.9}                           | 0.4         | 1.0<br>{4.2}                           | 0.4         | 1.3<br>{5.3}                           | 0.75        | 2.9<br>{11.6}                          | 1.5         | 7.1<br>{28.6}                          | 3.7<br>2.2  | 21.3<br>{85.0}<br>10.0<br>{39.8}       | 5.5         | 40.2<br>{160.6}                        | —           | —                                      | —           | —                                      |
| 25                      | 0.2         | 0.5<br>{1.9}                           | 0.4         | 1.0<br>{4.2}                           | 0.4         | 1.3<br>{5.3}                           | 0.75        | 2.9<br>{11.5}                          | 1.5         | 7.1<br>{28.4}                          | 2.2         | 10.0<br>{40.0}                         | 3.7         | 22.3<br>{89.0}                         | 5.5         | 41.7<br>{166.6}                        | —           | —                                      |
| 30                      | —           | —                                      | 0.2         | 0.5<br>{2.0}                           | 0.4         | 1.3<br>{5.3}                           | 0.75        | 2.9<br>{11.6}                          | 0.75        | 2.8<br>{11.3}                          | 2.2         | 10.0<br>{40.0}                         | 3.7         | 22.3<br>{89.0}                         | 5.5         | 42.2<br>{168.6}                        | —           | —                                      |
| 40                      | —           | —                                      | 0.2         | 0.5<br>{2.0}                           | 0.4         | 1.3<br>{5.3}                           | 0.75        | 2.9<br>{11.5}                          | 0.75        | 2.8<br>{11.3}                          | 1.5         | 7.2<br>{28.8}                          | 2.2         | 11.0<br>{44.0}                         | 3.7         | 23.8<br>{95.0}                         | 5.5         | 44.7<br>{178.6}                        |
| 50                      | —           | —                                      | 0.2         | 0.5<br>{2.0}                           | 0.4         | 1.3<br>{5.3}                           | 0.75        | 2.9<br>{11.5}                          | 0.75        | 2.8<br>{11.2}                          | 1.5         | 7.2<br>{28.8}                          | 2.2         | 11.0<br>{44.0}                         | 3.7         | 23.8<br>{95.0}                         | 5.5         | 44.2<br>{176.6}                        |
| 60                      | —           | —                                      | 0.2         | 0.5<br>{2.0}                           | 0.4         | 1.3<br>{5.3}                           | 0.75        | 2.9<br>{11.5}                          | 0.75        | 2.8<br>{11.1}                          | 1.5         | 7.2<br>{28.8}                          | 2.2         | 10.8<br>{43.0}                         | 3.7         | 23.5<br>{94.0}                         | 5.5         | 43.9<br>{175.6}                        |

\* For motors with brakes, add the moment of inertia and  $GD^2$  listed in the Brake Characteristics table on page 222.

## Structure

### EWJ/EW Series

#### ■ Reduction Ratio

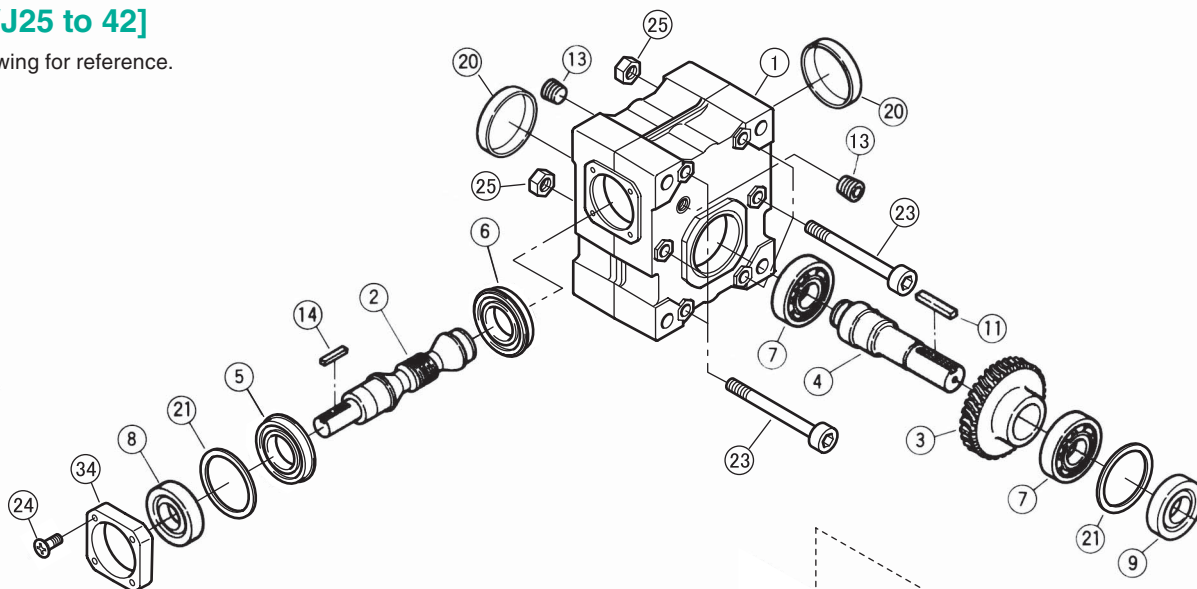
| Single | 1/10 | 1/15 | 1/20 | 1/25 | 1/30 | 1/40 | 1/50 | 1/60 |
|--------|------|------|------|------|------|------|------|------|
|--------|------|------|------|------|------|------|------|------|

#### ■ Center Distance

| Size            | 25    | 35    | 42    | 50    | 63    | 70    | 80    | 100    | 125    | 150    | 175    | 200    |
|-----------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| Center distance | 25 mm | 35 mm | 42 mm | 50 mm | 63 mm | 70 mm | 80 mm | 100 mm | 125 mm | 150 mm | 175 mm | 200 mm |

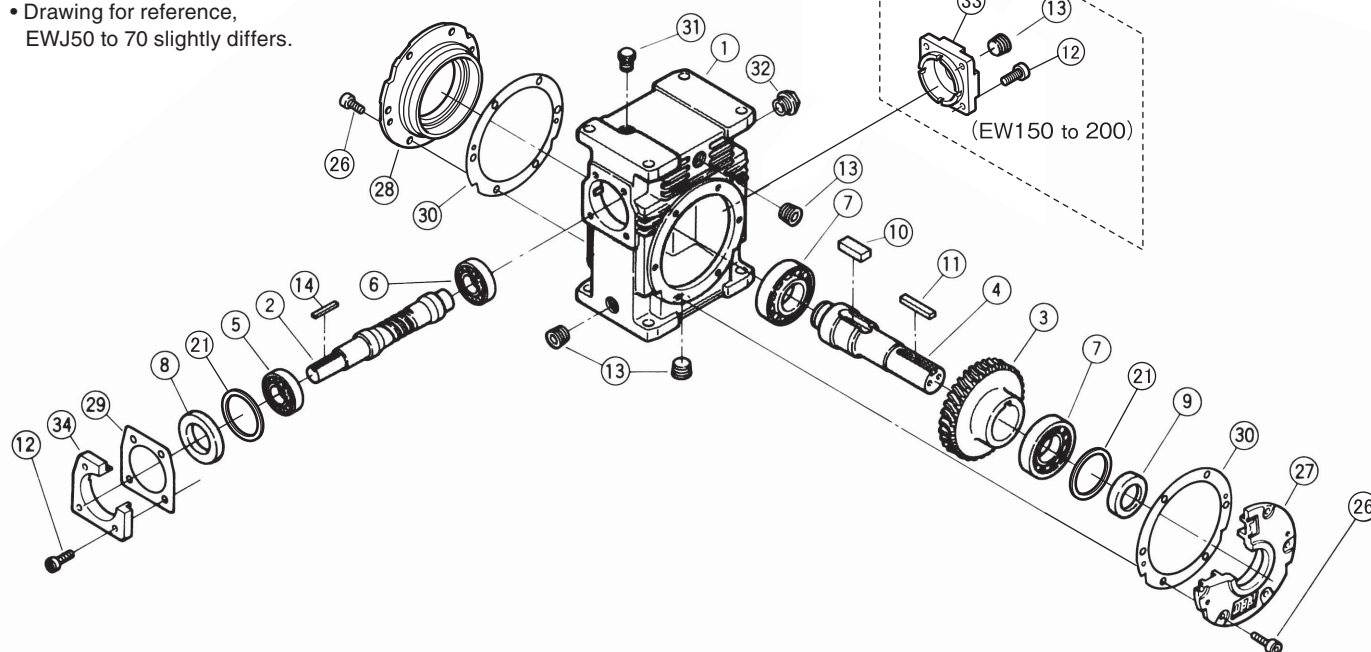
#### [EWJ25 to 42]

• Drawing for reference.



#### [EWJ50 to 70, EW80 to 200]

• Drawing for reference,  
EWJ50 to 70 slightly differs.



#### ■ Part list Refer to the part list on pages 256 to 257 for bearings and oilseals.

| No. | Part                  | No. | Part                  | No. | Part            | No. | Part                                       | No. | Part                      | No. | Part               |
|-----|-----------------------|-----|-----------------------|-----|-----------------|-----|--------------------------------------------|-----|---------------------------|-----|--------------------|
| 1   | Case                  | 6   | Input shaft bearing B | 11  | Flat key square | 20  | Seal cap                                   | 25  | Hex nut                   | 30  | Shim II            |
| 2   | Worm                  | 7   | Output shaft bearing  | 12  | Hex cap bolt    | 21  | Filter set                                 | 26  | Hex cap bolt              | 31  | Pressure vent      |
| 3   | Worm wheel            | 8   | Input shaft oil seal  | 13  | Plug with hole  |     |                                            | 27  | Output bearing support I  | 32  | Oil gauge          |
| 4   | Output shaft          | 9   | Output shaft oil seal | 14  | Flat key square | 23  | Hex cap bolt                               | 28  | Output bearing support II | 33  | Input cap          |
| 5   | Input shaft bearing A | 10  | Flat key square       |     |                 | 24  | Cross-recessed countersunk flat head screw | 29  | Shim I                    | 34  | Input seal support |

## EWJM(R)/EWM(R) Series

### ■ Reduction Ratio

| Single | 1/10 | 1/15 | 1/20 | 1/25 | 1/30 | 1/40 | 1/50 | 1/60 |
|--------|------|------|------|------|------|------|------|------|
|--------|------|------|------|------|------|------|------|------|

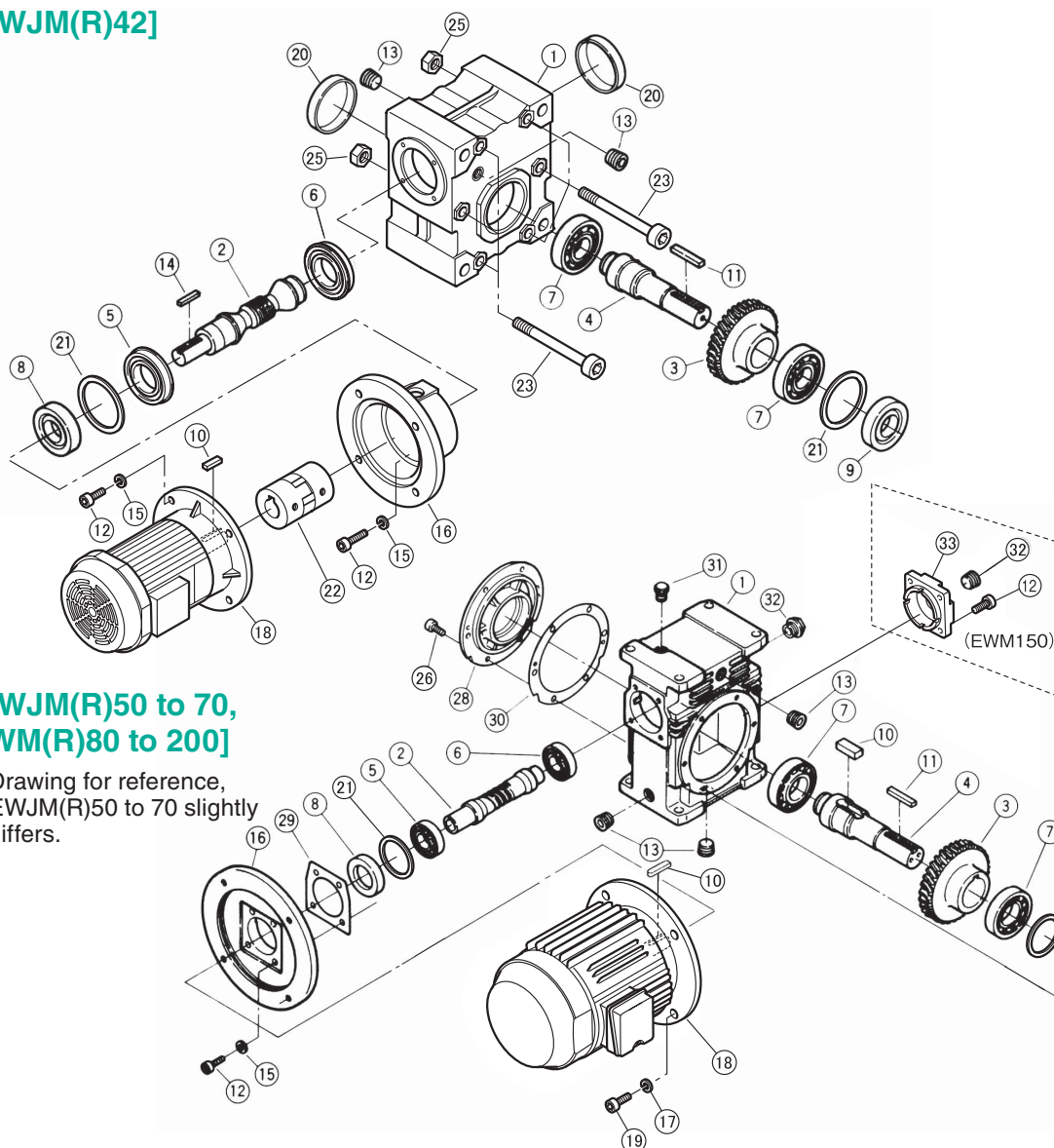
### ■ Standard Motor

| Size     | 42          | 50          | 63          | 70          | 80         | 100        | 125        | 150 |
|----------|-------------|-------------|-------------|-------------|------------|------------|------------|-----|
| Motor kW | 0.2 to 0.75 | 0.4 to 0.75 | 0.75 to 1.5 | 0.75 to 2.2 | 1.5 to 3.7 | 2.2 to 5.5 | 3.7 to 5.5 | 5.5 |

### ■ Center Distance

| Size            | 42    | 50    | 63    | 70    | 80    | 100    | 125    | 150    |
|-----------------|-------|-------|-------|-------|-------|--------|--------|--------|
| Center distance | 42 mm | 50 mm | 63 mm | 70 mm | 80 mm | 100 mm | 125 mm | 150 mm |

### [EWJM(R)42]



### [EWJM(R)50 to 70, EWM(R)80 to 200]

- Drawing for reference, EWJM(R)50 to 70 slightly differs.

### ■ Part list Refer to the part list on pages 256 to 257 for bearings and oilseals.

| No. | Part                  | No. | Part                  | No. | Part            | No. | Part         | No. | Part                      | No. | Part          |
|-----|-----------------------|-----|-----------------------|-----|-----------------|-----|--------------|-----|---------------------------|-----|---------------|
| 1   | Case                  | 7   | Output shaft bearing  | 13  | Plug with hole  | 19  | Hex cap bolt | 25  | Hex nut                   | 31  | Pressure vent |
| 2   | Worm                  | 8   | Input shaft oil seal  | 14  | Flat key square | 20  | Seal cap     | 26  | Hex cap bolt              | 32  | Oil gauge     |
| 3   | Worm wheel            | 9   | Output shaft oil seal | 15  | Spring washer   | 21  | Filter set   | 27  | Output bearing support I  | 33  | Input cap     |
| 4   | Output shaft          | 10  | Flat key square       | 16  | M Flange        | 22  | coupling     | 28  | Output bearing support II |     |               |
| 5   | Input shaft bearing A | 11  | Flat key square       | 17  | Spring washer   | 23  | Hex cap bolt | 29  | Shim I                    |     |               |
| 6   | Input shaft bearing B | 12  | Hex cap bolt          | 18  | Motor           |     |              | 30  | Shim II                   |     |               |

## Structure

### SWJ/SW Series

#### ■ Reduction Ratio

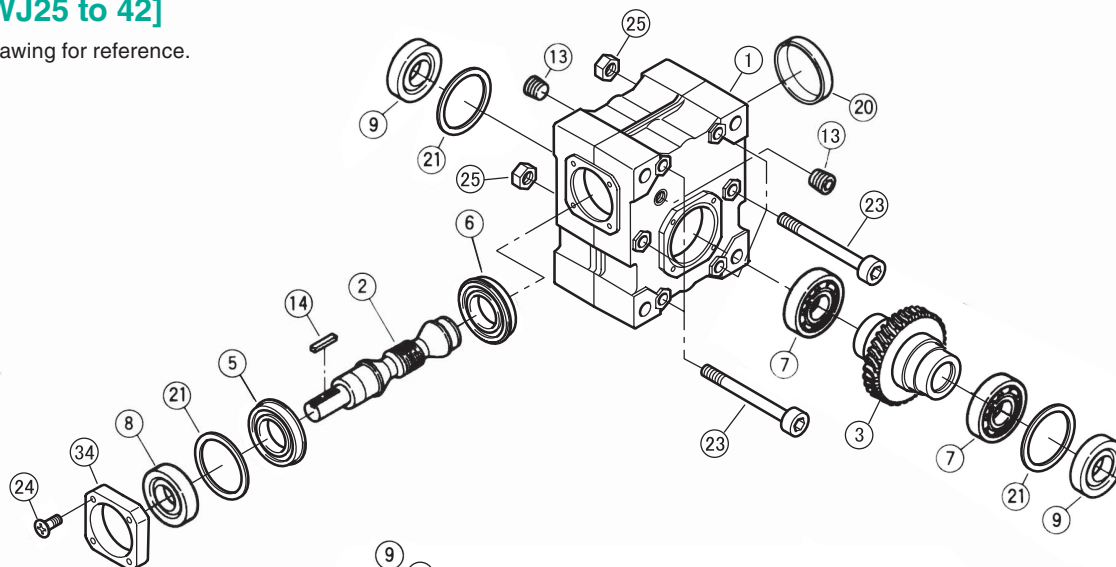
| Single | 1/10 | 1/15 | 1/20 | 1/25 | 1/30 | 1/40 | 1/50 | 1/60 |
|--------|------|------|------|------|------|------|------|------|
|--------|------|------|------|------|------|------|------|------|

#### ■ Center Distance

| Size            | 25    | 35    | 42    | 50    | 63    | 70    | 80    | 100    | 125    | 150    | 175    | 200    |
|-----------------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| Center distance | 25 mm | 35 mm | 42 mm | 50 mm | 63 mm | 70 mm | 80 mm | 100 mm | 125 mm | 150 mm | 175 mm | 200 mm |

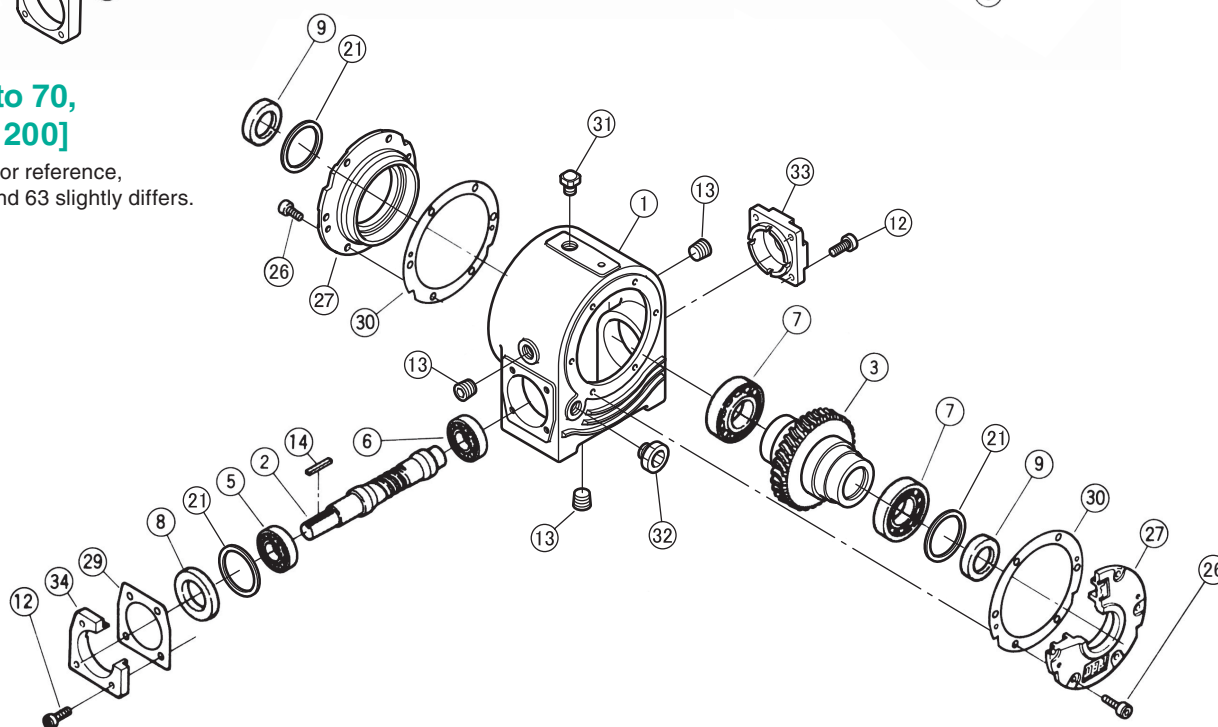
#### [SWJ25 to 42]

• Drawing for reference.



#### [SWJ50 to 70, SW80 to 200]

• Drawing for reference,  
SWJ50 and 63 slightly differs.



#### ■ Part list Refer to the part list on pages 256 to 257 for bearings and oilseals.

| No. | Part                                  | No. | Part                  | No. | Part            | No. | Part                                       | No. | Part                     | No. | Part               |
|-----|---------------------------------------|-----|-----------------------|-----|-----------------|-----|--------------------------------------------|-----|--------------------------|-----|--------------------|
| 1   | Case                                  | 6   | Input shaft bearing B |     |                 | 20  | Seal cap                                   | 25  | Hex nut                  | 30  | Shim II            |
| 2   | Worm                                  | 7   | Output shaft bearing  | 12  | Hex cap bolt    | 21  | Filter set                                 | 26  | Hex cap bolt             | 31  | Pressure vent      |
| 3   | Integral output shaft with worm wheel | 8   | Input shaft oil seal  | 13  | Plug with hole  |     |                                            | 27  | Output bearing support I | 32  | Oil gauge          |
|     |                                       | 9   | Output shaft oil seal | 14  | Flat key square | 23  | Hex cap bolt                               |     |                          | 33  | Input cap          |
| 5   | Input shaft bearing A                 |     |                       |     |                 | 24  | Cross-recessed countersunk flat head screw | 29  | Shim I                   | 34  | Input seal support |



## SWJM(R)/SWM(R) Series

### ■ Reduction Ratio

| Single | 1/10 | 1/15 | 1/20 | 1/25 | 1/30 | 1/40 | 1/50 | 1/60 |
|--------|------|------|------|------|------|------|------|------|
|--------|------|------|------|------|------|------|------|------|

### ■ Standard Motor

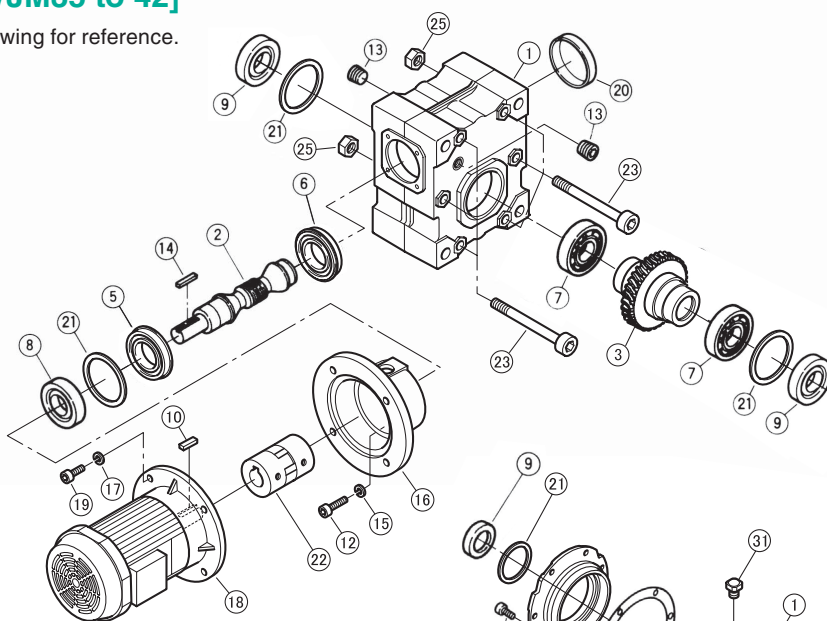
| Size     | 35  | 42         | 50          | 63          | 70          | 80         | 100        | 125        | 150 |
|----------|-----|------------|-------------|-------------|-------------|------------|------------|------------|-----|
| Motor kW | 0.2 | 0.2 to 0.4 | 0.4 to 0.75 | 0.75 to 1.5 | 0.75 to 2.2 | 1.5 to 3.7 | 2.2 to 5.5 | 3.7 to 5.5 | 5.5 |

### ■ Center Distance

| Size            | 35    | 42    | 50    | 63    | 70    | 80    | 100    | 125    | 150    |
|-----------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| Center distance | 35 mm | 42 mm | 50 mm | 63 mm | 70 mm | 80 mm | 100 mm | 125 mm | 150 mm |

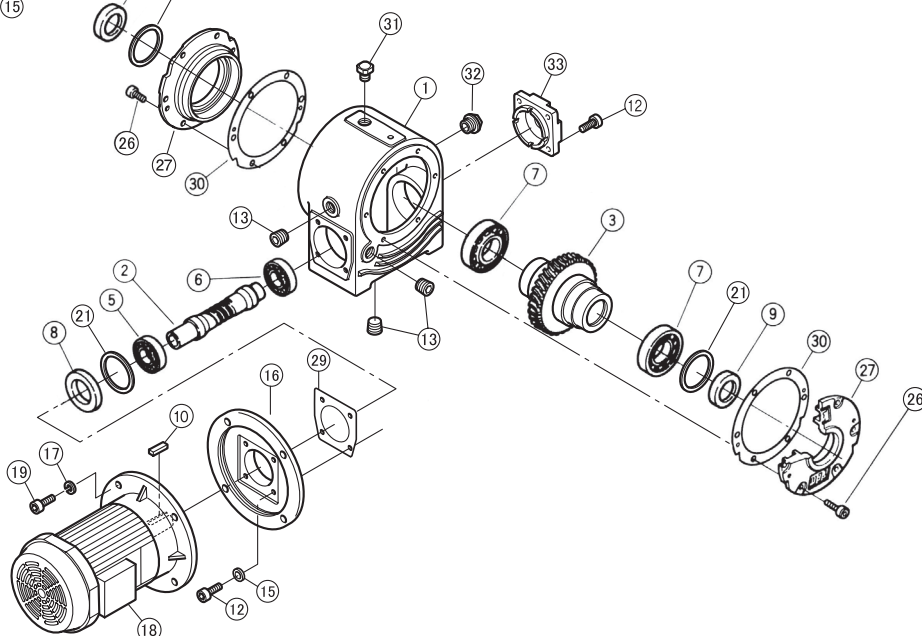
### [SWJM35 to 42]

• Drawing for reference.



### [SWJM(R)50 to 70, SWM(R)80 to 200]

• Drawing for reference,  
SWJM(R)50 and 63 slightly differs.



■ Part list Refer to the part list on pages 256 to 257 for bearings and oilseals.

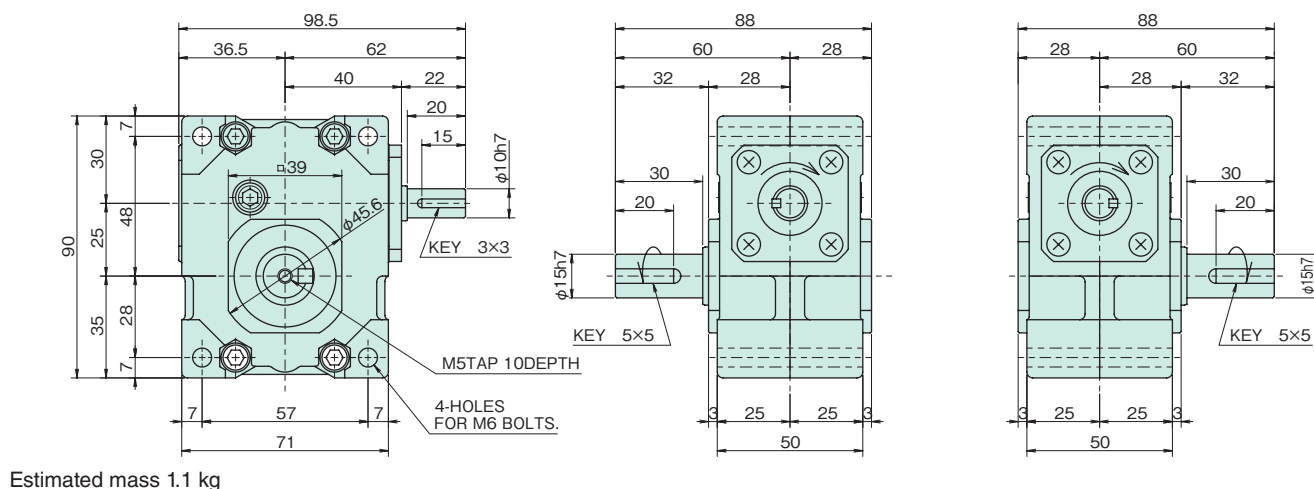
| No. | Part                                  | No. | Part                  | No. | Part            | No. | Part           | No. | Part                     | No. | Part          |
|-----|---------------------------------------|-----|-----------------------|-----|-----------------|-----|----------------|-----|--------------------------|-----|---------------|
| 1   | Case                                  | 7   | Output shaft bearing  | 13  | Plug with hole  | 19  | Hex cap bolt   | 25  | Hex nut                  | 31  | Pressure vent |
| 2   | Worm                                  | 8   | Input shaft oil seal  | 14  | Flat key square | 20  | Seal cap       | 26  | Hex cap bolt             | 32  | Oil gauge     |
| 3   | Integral output shaft with worm wheel | 9   | Output shaft oil seal | 15  | Spring washer   | 21  | Filter set     | 27  | Output bearing support I | 33  | Input cap     |
|     |                                       | 10  | Flat key square       | 16  | M Flange        |     |                |     |                          |     |               |
| 5   | Input shaft bearing A                 | 11  | Flat key square       | 17  | Spring washer   | 23  | Hex cap bolt A | 29  | Shim I                   |     |               |
| 6   | Input shaft bearing B                 | 12  | Hex cap bolt          | 18  | Motor           |     |                | 30  | Shim II                  |     |               |

## Dimensional Drawings EWJ25E/SWJ25E

**EWJ25E**

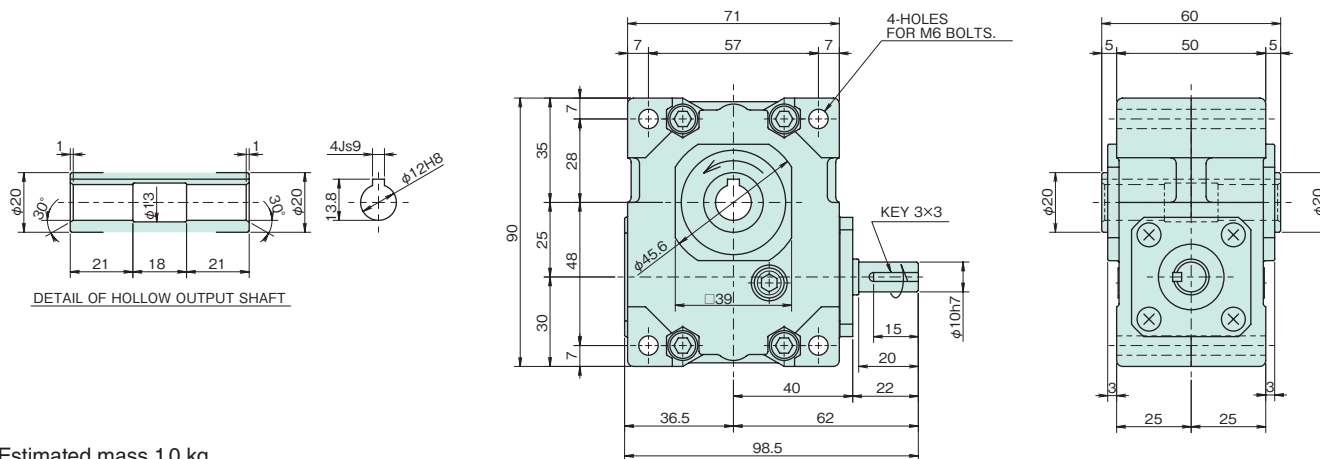
[L]

[R]



**SWJ25E**

[DF]



\* Tsubaki offers optional mounting bolts and mounting feet. Refer to page 229.

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

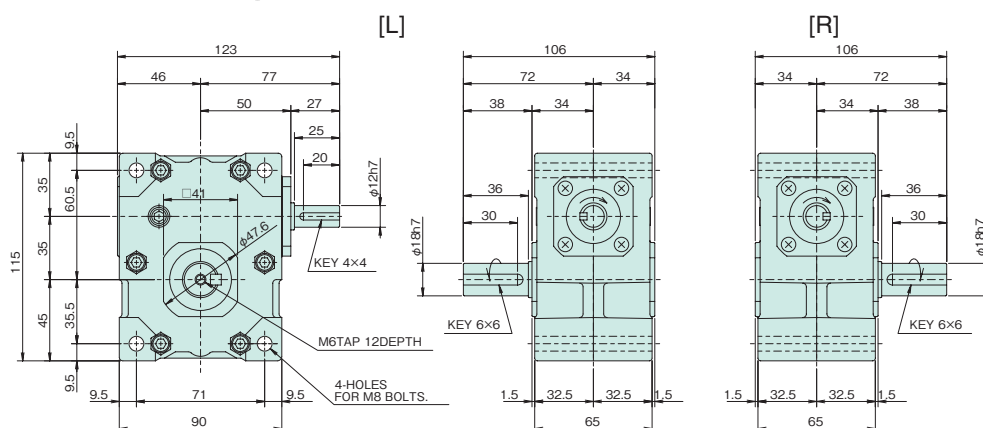
### Transfer Capacity Table

| Size           | Input<br>Reduction<br>ratio | 1750 r/min  |                              | 1450 r/min  |                              | 1150 r/min  |                              | 950 r/min   |                              | 500 r/min   |                              | 100 r/min   |                              |
|----------------|-----------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|
|                |                             | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} |
| EWJ25<br>SWJ25 | 10                          | 0.27        | 12.4{1.26}                   | 0.24        | 13.3{1.36}                   | 0.22        | 14.8{1.51}                   | 0.18        | 14.9{1.52}                   | 0.10        | 14.9{1.52}                   | 0.021       | 14.9{1.52}                   |
|                | 15                          | 0.20        | 12.9{1.31}                   | 0.18        | 13.9{1.41}                   | 0.16        | 14.9{1.52}                   | 0.13        | 14.9{1.52}                   | 0.07        | 14.9{1.52}                   | 0.016       | 14.9{1.52}                   |
|                | 20                          | 0.16        | 13.5{1.38}                   | 0.15        | 14.5{1.48}                   | 0.12        | 14.9{1.52}                   | 0.10        | 14.9{1.52}                   | 0.06        | 14.9{1.52}                   | 0.013       | 14.9{1.52}                   |
|                | 25                          | 0.14        | 13.9{1.42}                   | 0.13        | 14.9{1.52}                   | 0.10        | 14.9{1.52}                   | 0.09        | 14.9{1.52}                   | 0.05        | 14.9{1.52}                   | 0.011       | 14.9{1.52}                   |
|                | 30                          | 0.12        | 13.6{1.39}                   | 0.11        | 14.7{1.50}                   | 0.09        | 14.9{1.52}                   | 0.08        | 14.9{1.52}                   | 0.04        | 14.9{1.52}                   | 0.010       | 14.9{1.52}                   |
|                | 40                          | 0.10        | 13.9{1.42}                   | 0.09        | 14.9{1.52}                   | 0.08        | 14.9{1.52}                   | 0.07        | 14.9{1.52}                   | 0.04        | 14.9{1.52}                   | 0.009       | 14.9{1.52}                   |
|                | 50                          | 0.09        | 13.9{1.42}                   | 0.08        | 14.4{1.47}                   | 0.07        | 14.9{1.52}                   | 0.06        | 14.9{1.52}                   | 0.03        | 14.9{1.52}                   | 0.008       | 14.9{1.52}                   |
|                | 60                          | 0.07        | 13.0{1.33}                   | 0.06        | 13.5{1.37}                   | 0.06        | 13.9{1.42}                   | 0.05        | 14.3{1.46}                   | 0.03        | 14.3{1.46}                   | 0.007       | 14.3{1.46}                   |

When running a speed within the shaded boxes, and also continuously for more than one hour, refer to the thermal rating factor on page 17 to factor this into your selection.

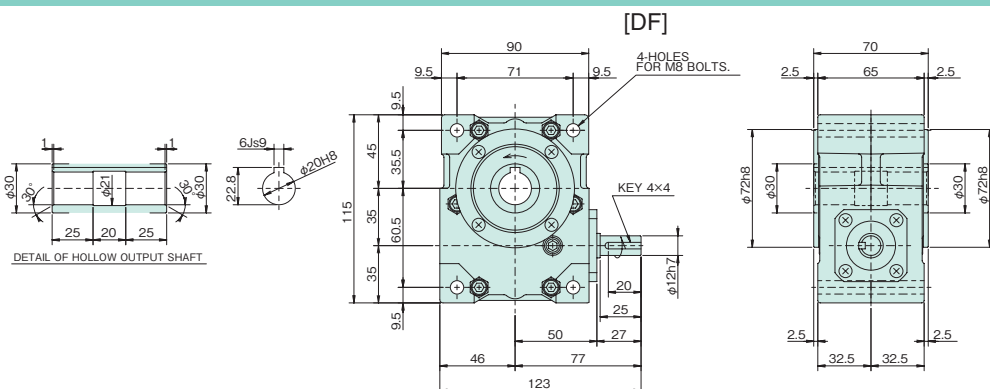
# Dimensional Drawings EWJ35E/SWJ35E/SWJM35E

## EWJ35E



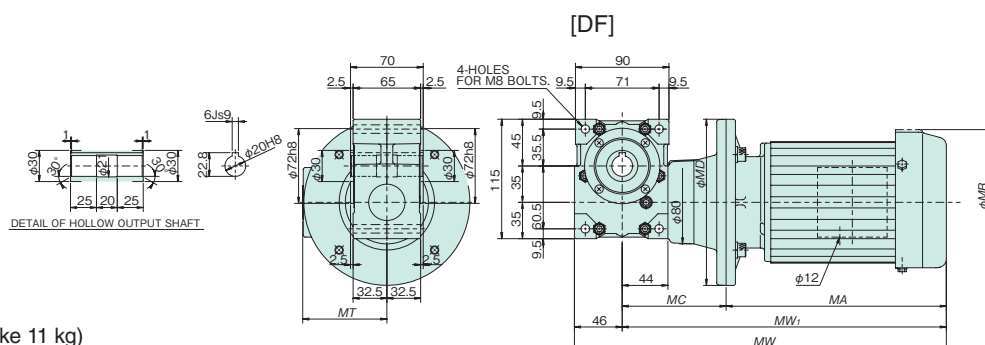
Estimated mass 1.9 kg

## SWJ35E



Estimated mass 1.9 kg

## SWJM35E



Estimated mass 9.1 kg (With brake 11 kg)

\* Tsubaki offers optional mounting bolts and mounting feet. Refer to page 229.

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

| Size           | Input<br>Reduction<br>ratio | 1750 r/min  |                              | 1450 r/min  |                              | 1150 r/min  |                              | 950 r/min   |                              | 500 r/min   |                              | 100 r/min   |                              |
|----------------|-----------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|
|                |                             | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} |
| EWJ35<br>SWJ35 | 10                          | 0.59        | 27.6{2.81}                   | 0.53        | 29.7{3.03}                   | 0.49        | 33.8{3.45}                   | 0.44        | 36.5{3.73}                   | 0.24        | 37.3{3.81}                   | 0.053       | 37.3{3.81}                   |
|                | 15                          | 0.41        | 27.5{2.81}                   | 0.37        | 29.7{3.03}                   | 0.34        | 33.5{3.42}                   | 0.32        | 37.7{3.85}                   | 0.18        | 37.7{3.85}                   | 0.039       | 37.7{3.85}                   |
|                | 20                          | 0.33        | 27.8{2.84}                   | 0.30        | 30.0{3.06}                   | 0.27        | 33.7{3.44}                   | 0.26        | 37.7{3.85}                   | 0.14        | 37.7{3.85}                   | 0.032       | 37.7{3.85}                   |
|                | 25                          | 0.28        | 28.7{2.93}                   | 0.26        | 31.0{3.16}                   | 0.23        | 34.7{3.54}                   | 0.21        | 37.7{3.85}                   | 0.12        | 37.7{3.85}                   | 0.027       | 37.7{3.85}                   |
|                | 30                          | 0.25        | 29.3{2.99}                   | 0.23        | 31.6{3.22}                   | 0.21        | 35.3{3.60}                   | 0.19        | 37.7{3.85}                   | 0.11        | 37.7{3.85}                   | 0.025       | 37.7{3.85}                   |
|                | 40                          | 0.20        | 28.8{2.94}                   | 0.19        | 31.1{3.18}                   | 0.17        | 34.7{3.54}                   | 0.16        | 37.7{3.85}                   | 0.09        | 37.7{3.85}                   | 0.022       | 37.7{3.85}                   |
|                | 50                          | 0.18        | 29.6{3.02}                   | 0.16        | 31.9{3.26}                   | 0.15        | 35.5{3.63}                   | 0.14        | 37.7{3.85}                   | 0.08        | 37.7{3.85}                   | 0.019       | 37.7{3.85}                   |
|                | 60                          | 0.16        | 29.5{3.01}                   | 0.15        | 31.8{3.25}                   | 0.14        | 35.3{3.61}                   | 0.12        | 37.0{3.78}                   | 0.07        | 37.0{3.78}                   | 0.018       | 37.0{3.78}                   |

When running a speed within the shaded boxes  , and also continuously for more than one hour, refer to the thermal rating factor on page 17 to factor this into your selection.

| Size   | Standard combination |                    | 1750 r/min                   | 1450 r/min                   | Values in ( ) for the motor indicates dimensions for a motor with a brake. |              |                 |              |              |              |               |                      |
|--------|----------------------|--------------------|------------------------------|------------------------------|----------------------------------------------------------------------------|--------------|-----------------|--------------|--------------|--------------|---------------|----------------------|
|        | Motor<br>kW          | Reduction<br>ratio | Output torque<br>N·m {kgf·m} | Output torque<br>N·m {kgf·m} | MA                                                                         | MC           | MW <sub>1</sub> | MW           | MB           | MD           | MT            | Estimated mass<br>kg |
| SWJM35 | 0.2                  | 10                 | 9.30 {0.95}                  | 11.2 {1.14}                  | 212<br>(229)                                                               | 100<br>(100) | 312<br>(329)    | 358<br>(375) | 140<br>(140) | 160<br>(160) | 81<br>(104.5) | 9.2 (11)             |
|        |                      | 15                 | 13.4 {1.36}                  | 15.9 {1.62}                  |                                                                            |              |                 |              |              |              |               |                      |
|        |                      | 20                 | 16.9 {1.73}                  | 20.1 {2.05}                  |                                                                            |              |                 |              |              |              |               |                      |
|        |                      | 25                 | 20.4 {2.08}                  | 24.2 {2.47}                  |                                                                            |              |                 |              |              |              |               |                      |

\* Motor/reducer combinations shown are standard.

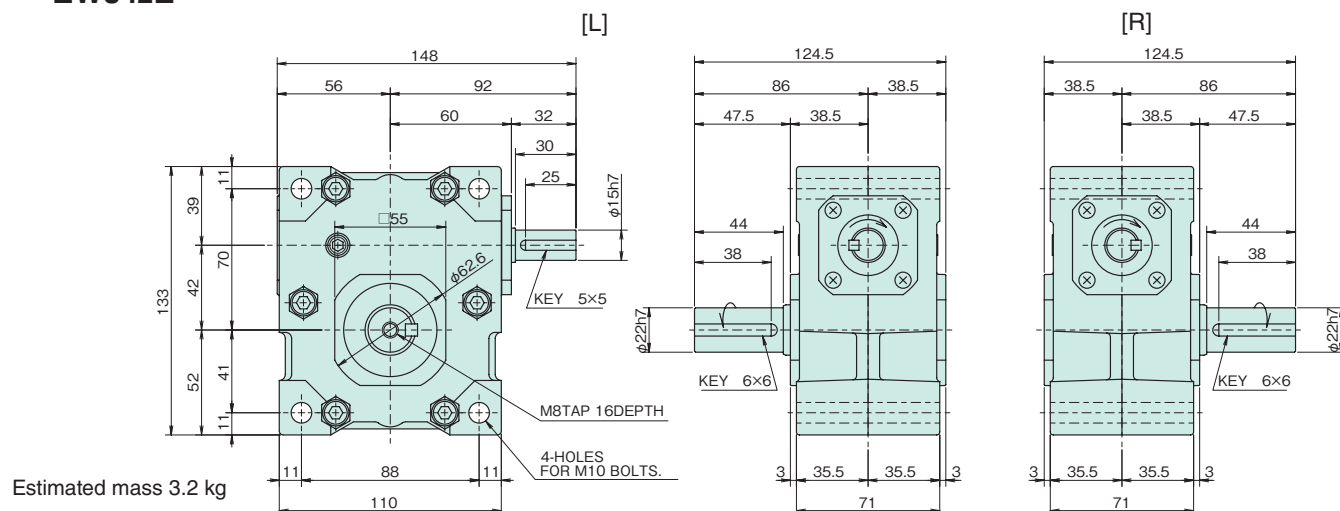
\* Refer to page 17 for sizing. \* Thermal rating factor is 1.0.

## Dimensional Drawings EWJ42E/SWJ42E

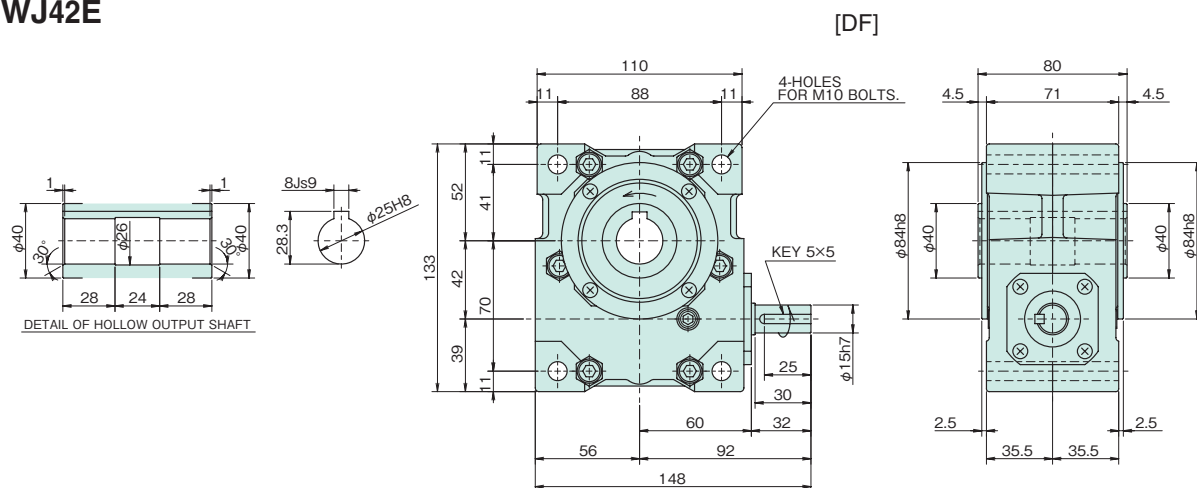
**See next page for reducers with motors**



## EWJ42E



## SWJ42E



Estimated mass 3.2 kg

\* Tsubaki offers optional mounting bolts and mounting feet. Refer to page 229.

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

| Size           | Input           | 1750 r/min |                           | 1450 r/min |                           | 1150 r/min |                           | 950 r/min |                           | 500 r/min |                           | 100 r/min |                           |
|----------------|-----------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
|                | Reduction ratio | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} |
| EWJ42<br>SWJ42 | 10              | 0.87       | 41.1{4.20}                | 0.81       | 45.5{4.65}                | 0.73       | 51.3{5.23}                | 0.67      | 56.5{5.76}                | 0.45      | 68.8{7.02}                | 0.097     | 68.8{7.02}                |
|                | 15              | 0.67       | 45.2{4.61}                | 0.61       | 48.8{4.98}                | 0.55       | 55.0{5.62}                | 0.50      | 59.5{6.07}                | 0.32      | 68.9{7.03}                | 0.070     | 68.9{7.03}                |
|                | 20              | 0.54       | 46.3{4.73}                | 0.49       | 50.0{5.10}                | 0.45       | 56.1{5.73}                | 0.40      | 60.6{6.19}                | 0.26      | 69.0{7.04}                | 0.058     | 69.0{7.04}                |
|                | 25              | 0.46       | 47.8{4.88}                | 0.42       | 51.6{5.27}                | 0.38       | 57.8{5.90}                | 0.35      | 62.5{6.38}                | 0.22      | 69.0{7.04}                | 0.049     | 69.0{7.04}                |
|                | 30              | 0.40       | 47.3{4.83}                | 0.37       | 51.1{5.21}                | 0.33       | 57.0{5.82}                | 0.30      | 61.6{6.29}                | 0.19      | 69.0{7.04}                | 0.045     | 69.0{7.04}                |
|                | 40              | 0.33       | 47.8{4.88}                | 0.30       | 51.6{5.27}                | 0.28       | 57.5{5.87}                | 0.25      | 62.1{6.34}                | 0.16      | 69.0{7.04}                | 0.039     | 69.0{7.04}                |
|                | 50              | 0.29       | 49.1{5.01}                | 0.26       | 53.0{5.40}                | 0.24       | 58.9{6.01}                | 0.22      | 63.6{6.49}                | 0.14      | 69.0{7.04}                | 0.034     | 69.0{7.04}                |
|                | 60              | 0.26       | 50.1{5.12}                | 0.24       | 54.1{5.52}                | 0.22       | 60.0{6.13}                | 0.20      | 63.2{6.45}                | 0.12      | 64.3{6.56}                | 0.029     | 64.3{6.56}                |

When running a speed within the shaded boxes , and also continuously for more than one hour, refer to the thermal rating factor on page 17 to factor this into your selection.

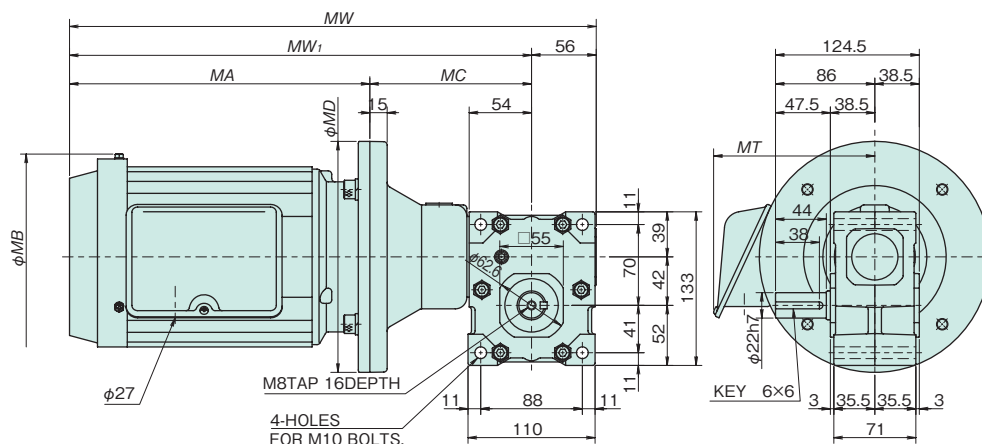
## Dimensional Drawings EWJM(R)42E/SWJM42E



See previous page for reducers without motors

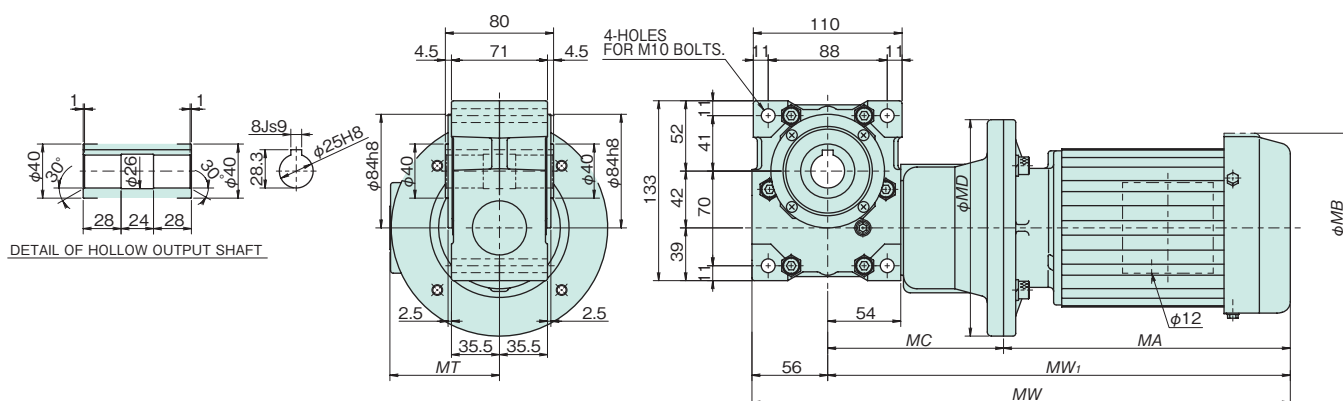
## EWJM(R)42E

[R]



## SWJM42E

[DF]



\* Tsubaki offers optional mounting bolts and mounting feet. Refer to page 229.

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

| Size    | Standard combination |                 | 1750 r/min                | 1450 r/min                | Values in ( ) for the motor indicates dimensions for a motor with a brake. |              |                 |              |              |              |                |                   |
|---------|----------------------|-----------------|---------------------------|---------------------------|----------------------------------------------------------------------------|--------------|-----------------|--------------|--------------|--------------|----------------|-------------------|
|         | Motor kW             | Reduction ratio | Output torque N·m {kgf·m} | Output torque N·m {kgf·m} | MA                                                                         | MC           | MW <sub>1</sub> | MW           | MB           | MD           | MT             | Estimated mass kg |
| EWJM42  | 0.2                  | 40              | 29.0 {2.96}               | 34.1 {3.48}               | 212<br>(229)                                                               | 130<br>(130) | 342<br>(359)    | 398<br>(415) | 140<br>(140) | 160<br>(160) | 81<br>(104.5)  | 11<br>(14)        |
|         |                      | 50              | 34.2 {3.49}               | 40.0 {4.08}               |                                                                            |              |                 |              |              |              |                |                   |
|         |                      | 60              | 38.8 {3.96}               | 45.2 {4.62}               |                                                                            |              |                 |              |              |              |                |                   |
|         | 0.4                  | 15              | 27.0 {2.76}               | 32.2 {3.29}               | 224<br>(241)                                                               | 130<br>(130) | 354<br>(371)    | 410<br>(427) | 140<br>(140) | 160<br>(160) | 81<br>(104.5)  | 12<br>(15)        |
|         |                      | 20              | 34.4 {3.51}               | 40.8 {4.17}               |                                                                            |              |                 |              |              |              |                |                   |
|         |                      | 25              | 41.5 {4.23}               | 49.2 {5.02}               |                                                                            |              |                 |              |              |              |                |                   |
|         |                      | 30              | 47.3 {4.83}               | 51.1 {5.21}               |                                                                            |              |                 |              |              |              |                |                   |
| EWJMR42 | 0.75                 | 10              | 35.3 {3.60}               | 42.4 {4.30}               | 260<br>(305)                                                               | 140<br>(140) | 400<br>(445)    | 456<br>(501) | 178<br>(140) | 200<br>(200) | 140<br>(104.5) | 20<br>(23)        |
| SWJM42  | 0.2                  | 30              | 23.7 {2.42}               | 28.0 {2.85}               | 212<br>(229)                                                               | 130<br>(130) | 342<br>(359)    | 398<br>(415) | 140<br>(140) | 160<br>(160) | 81<br>(104.5)  | 11<br>(13)        |
|         |                      | 40              | 29.0 {2.96}               | 34.1 {3.48}               |                                                                            |              |                 |              |              |              |                |                   |
|         |                      | 50              | 34.2 {3.49}               | 40.0 {4.08}               |                                                                            |              |                 |              |              |              |                |                   |
|         |                      | 60              | 38.8 {3.96}               | 45.2 {4.62}               |                                                                            |              |                 |              |              |              |                |                   |
|         | 0.4                  | 10              | 18.8 {1.92}               | 22.5 {2.29}               | 224<br>(241)                                                               | 130<br>(130) | 354<br>(371)    | 410<br>(427) | 140<br>(140) | 160<br>(160) | 81<br>(104.5)  | 12<br>(15)        |
|         |                      | 15              | 27.0 {2.76}               | 32.2 {3.29}               |                                                                            |              |                 |              |              |              |                |                   |
|         |                      | 20              | 34.4 {3.51}               | 40.8 {4.17}               |                                                                            |              |                 |              |              |              |                |                   |
|         |                      | 25              | 41.5 {4.23}               | 49.2 {5.02}               |                                                                            |              |                 |              |              |              |                |                   |

\* Motor/reducer combinations shown are standard.

\* Shaded boxes  indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.

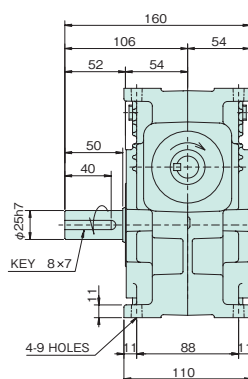
\* Refer to page 17 for sizing.      \* Thermal rating factor is 1.0.



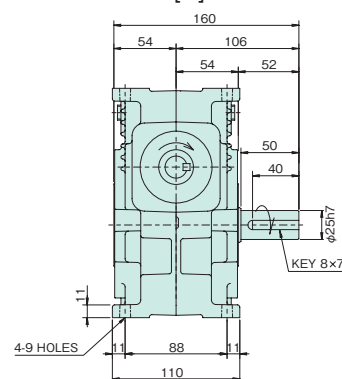
**See next page for reducers with motors**



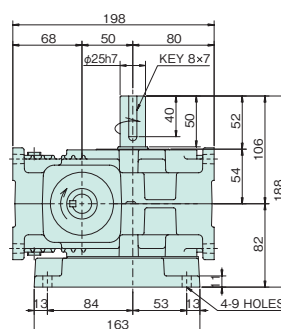
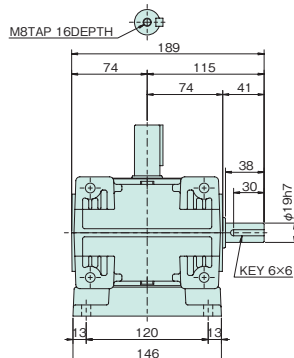
[L]



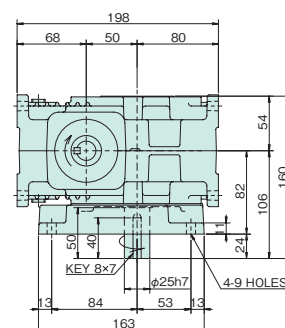
Estimated mass 7.0 kg



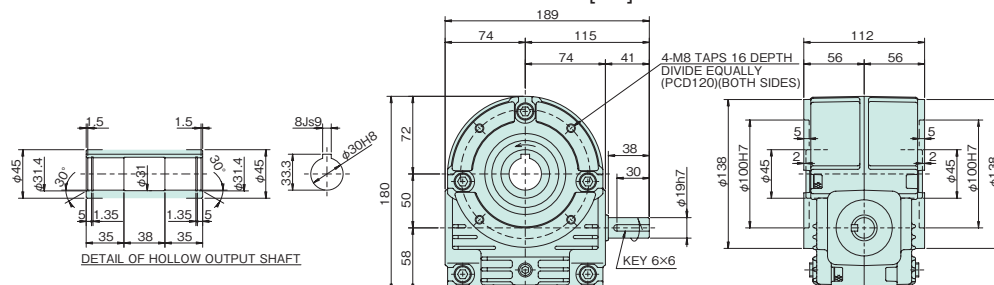
[RU]



Estimated mass 7.6 kg



[DF]



Estimated mass 11 kg

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

| Size  | Input           | 1750 r/min |                           | 1450 r/min |                           | 1150 r/min |                           | 950 r/min |                           | 500 r/min |                           | 100 r/min |                           |
|-------|-----------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
|       | Reduction ratio | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} |
| EWJ50 | 10              | 1.70       | 84 {8.6}                  | 1.54       | 91 { 9.3}                 | 1.34       | 99 {10.1}                 | 1.20      | 106 {10.9}                | 0.67      | 109 {11.1}                | 0.14      | 109 {11.1}                |
|       | 15              | 1.28       | 91 {9.3}                  | 1.16       | 99 {10.1}                 | 1.03       | 109 {11.1}                | 0.86      | 109 {11.1}                | 0.47      | 109 {11.1}                | 0.10      | 109 {11.1}                |
|       | 20              | 1.02       | 94 {9.6}                  | 0.92       | 101 {10.4}                | 0.80       | 109 {11.1}                | 0.67      | 109 {11.1}                | 0.37      | 109 {11.1}                | 0.08      | 109 {11.1}                |
|       | 25              | 0.85       | 95 {9.7}                  | 0.76       | 101 {10.3}                | 0.66       | 108 {11.1}                | 0.56      | 109 {11.1}                | 0.31      | 109 {11.1}                | 0.07      | 109 {11.1}                |
|       | 30              | 0.75       | 95 {9.7}                  | 0.68       | 103 {10.5}                | 0.59       | 109 {11.1}                | 0.50      | 109 {11.1}                | 0.28      | 109 {11.1}                | 0.07      | 109 {11.1}                |
|       | 40              | 0.59       | 94 {9.6}                  | 0.53       | 101 {10.3}                | 0.47       | 108 {11.1}                | 0.40      | 109 {11.1}                | 0.22      | 109 {11.1}                | 0.05      | 109 {11.1}                |
|       | 50              | 0.48       | 91 {9.3}                  | 0.43       | 98 {10.0}                 | 0.38       | 104 {10.6}                | 0.34      | 109 {11.1}                | 0.19      | 109 {11.1}                | 0.05      | 109 {11.1}                |
|       | 60              | 0.40       | 86 {8.8}                  | 0.36       | 92 { 9.4}                 | 0.32       | 98 {10.0}                 | 0.28      | 103 {10.5}                | 0.17      | 106 {10.8}                | 0.04      | 106 {10.8}                |
| SWJ50 | 10              | 1.56       | 77 {7.9}                  | 1.40       | 83 { 8.5}                 | 1.28       | 94 { 9.6}                 | 1.15      | 102 {10.4}                | 0.67      | 109 {11.1}                | 0.14      | 109 {11.1}                |
|       | 15              | 1.13       | 81 {8.2}                  | 1.02       | 87 { 8.9}                 | 0.89       | 94 { 9.6}                 | 0.78      | 99 {10.1}                 | 0.47      | 109 {11.1}                | 0.10      | 109 {11.1}                |
|       | 20              | 0.91       | 84 {8.6}                  | 0.82       | 91 { 9.2}                 | 0.71       | 97 { 9.9}                 | 0.63      | 102 {10.4}                | 0.37      | 109 {11.1}                | 0.08      | 109 {11.1}                |
|       | 25              | 0.77       | 86 {8.8}                  | 0.69       | 92 { 9.4}                 | 0.58       | 96 { 9.8}                 | 0.51      | 101 {10.3}                | 0.31      | 109 {11.1}                | 0.07      | 109 {11.1}                |
|       | 30              | 0.65       | 83 {8.5}                  | 0.60       | 90 { 9.2}                 | 0.52       | 97 { 9.9}                 | 0.46      | 102 {10.4}                | 0.28      | 109 {11.1}                | 0.06      | 109 {11.1}                |
|       | 40              | 0.52       | 84 {8.5}                  | 0.47       | 90 { 9.1}                 | 0.41       | 96 { 9.8}                 | 0.36      | 101 {10.3}                | 0.22      | 109 {11.1}                | 0.05      | 109 {11.1}                |
|       | 50              | 0.42       | 81 {8.2}                  | 0.38       | 86 { 8.8}                 | 0.34       | 92 { 9.4}                 | 0.30      | 97 { 9.9}                 | 0.19      | 109 {11.1}                | 0.05      | 109 {11.1}                |
|       | 60              | 0.37       | 80 {8.2}                  | 0.34       | 86 { 8.7}                 | 0.29       | 91 { 9.3}                 | 0.26      | 95 { 9.7}                 | 0.17      | 105 {10.7}                | 0.04      | 106 {10.8}                |

When running a speed within the shaded boxes , and also continuously for more than one hour, refer to the thermal rating factor on page 17 to factor this into your selection.



**See next page for reducers with motors**



Technical drawings of the 1000 Series Motor Mounting Bracket showing front, side, and rear views with dimensions in millimeters.

**Front View:** Overall width 232 mm, overall height 239 mm. Mounting holes are spaced 90 mm apart. The central motor mounting hole has a diameter of  $\phi 25$  h7. The bracket has a total width of 174 mm at the base and a central width of 136 mm. The mounting holes are 19 mm from the side edges. The central motor mounting hole is 136 mm from the side edges. The mounting holes are 19 mm from the side edges. The mounting holes are 19 mm from the side edges.

**Side View:** Overall width 185 mm, overall height 126 mm. The mounting hole is 63 mm from the side edge. The central motor mounting hole has a diameter of  $\phi 30$  h7. The bracket has a total width of 126 mm at the base and a central width of 104 mm. The mounting holes are 13 mm from the side edges. The mounting holes are 13 mm from the side edges.

**Rear View:** Overall width 185 mm, overall height 126 mm. The mounting hole is 63 mm from the side edge. The central motor mounting hole has a diameter of  $\phi 30$  h7. The bracket has a total width of 126 mm at the base and a central width of 104 mm. The mounting holes are 13 mm from the side edges. The mounting holes are 13 mm from the side edges.

Estimated mass 11 kg

Technical drawings of the M10 TAP 20 DEPTH component, showing front, side, and top views with dimensions and labels.

**Front View:** Dimensions include 90, 142, 232, 90, 52, 50, 40, 16, 144, 176, and 16. Labels include "M10 TAP 20 DEPTH", "KEY 8x7", and  $\phi 25h7$ .

**Side View:** Dimensions include 78, 63, 98, 50, 60, 63, 124, 219, 95, 13, 16, 101, 64, 197, and 16. Labels include "KEY 8x7",  $\phi 30h7$ , and "4-11 HOLES".

**Top View:** Dimensions include 78, 63, 98, 239, 61, 185, 95, 124, 28, 13, 16, 101, 64, 197, and 16. Labels include "KEY 8x7",  $\phi 30h7$ , and "4-11 HOLES".

Estimated mass 12 kg

[illegible]

Estimated mass 16 kg

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

| Size  | Input           | 1750 r/min |                           | 1450 r/min |                           | 1150 r/min |                           | 950 r/min |                           | 500 r/min |                           | 100 r/min |                           |
|-------|-----------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
|       | Reduction ratio | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} |
| EWJ63 | 10              | 3.22       | 161 {16.4}                | 2.98       | 178 {18.2}                | 2.65       | 197 {20.1}                | 2.36      | 211 {21.6}                | 1.36      | 224 {22.9}                | 0.29      | 224 {22.9}                |
|       | 15              | 2.41       | 174 {17.7}                | 2.23       | 192 {19.6}                | 1.98       | 212 {21.6}                | 1.75      | 224 {22.9}                | 0.96      | 224 {22.9}                | 0.21      | 224 {22.9}                |
|       | 20              | 1.91       | 179 {18.2}                | 1.76       | 196 {20.0}                | 1.56       | 215 {22.0}                | 1.36      | 224 {22.9}                | 0.75      | 224 {22.9}                | 0.17      | 224 {22.9}                |
|       | 25              | 1.57       | 179 {18.3}                | 1.44       | 196 {20.0}                | 1.27       | 213 {21.7}                | 1.12      | 224 {22.9}                | 0.62      | 224 {22.9}                | 0.14      | 224 {22.9}                |
|       | 30              | 1.38       | 180 {18.4}                | 1.29       | 198 {20.2}                | 1.15       | 218 {22.3}                | 1.00      | 224 {22.9}                | 0.56      | 224 {22.9}                | 0.13      | 224 {22.9}                |
|       | 40              | 1.09       | 178 {18.2}                | 1.01       | 196 {20.0}                | 0.91       | 215 {21.9}                | 0.80      | 224 {22.9}                | 0.46      | 224 {22.9}                | 0.11      | 224 {22.9}                |
|       | 50              | 0.88       | 173 {17.7}                | 0.81       | 188 {19.2}                | 0.73       | 205 {20.9}                | 0.65      | 217 {22.1}                | 0.39      | 224 {22.9}                | 0.09      | 224 {22.9}                |
|       | 60              | 0.72       | 163 {16.7}                | 0.67       | 177 {18.1}                | 0.59       | 192 {19.6}                | 0.53      | 203 {20.7}                | 0.31      | 204 {20.8}                | 0.07      | 204 {20.8}                |
| SWJ63 | 10              | 2.70       | 135 {13.7}                | 2.43       | 145 {14.8}                | 2.20       | 164 {16.8}                | 1.99      | 178 {18.1}                | 1.36      | 224 {22.9}                | 0.29      | 224 {22.9}                |
|       | 15              | 1.95       | 140 {14.3}                | 1.76       | 152 {15.5}                | 1.59       | 170 {17.4}                | 1.44      | 184 {18.8}                | 0.96      | 224 {22.9}                | 0.21      | 224 {22.9}                |
|       | 20              | 1.56       | 145 {14.8}                | 1.41       | 157 {16.0}                | 1.28       | 176 {17.9}                | 1.16      | 190 {19.4}                | 0.75      | 224 {22.9}                | 0.17      | 224 {22.9}                |
|       | 25              | 1.32       | 151 {15.4}                | 1.20       | 163 {16.6}                | 1.08       | 182 {18.5}                | 0.99      | 197 {20.1}                | 0.62      | 224 {22.9}                | 0.14      | 224 {22.9}                |
|       | 30              | 1.13       | 147 {15.0}                | 1.03       | 158 {16.2}                | 0.93       | 177 {18.0}                | 0.85      | 191 {19.5}                | 0.56      | 224 {22.9}                | 0.13      | 224 {22.9}                |
|       | 40              | 0.92       | 150 {15.3}                | 0.84       | 163 {16.6}                | 0.76       | 181 {18.5}                | 0.70      | 196 {20.0}                | 0.46      | 224 {22.9}                | 0.11      | 224 {22.9}                |
|       | 50              | 0.79       | 155 {15.8}                | 0.72       | 168 {17.1}                | 0.66       | 186 {19.0}                | 0.61      | 202 {20.6}                | 0.39      | 224 {22.9}                | 0.09      | 224 {22.9}                |
|       | 60              | 0.70       | 158 {16.2}                | 0.64       | 171 {17.5}                | 0.59       | 190 {19.4}                | 0.52      | 200 {20.4}                | 0.31      | 204 {20.8}                | 0.07      | 204 {20.8}                |

When running a speed within the shaded boxes , and also continuously for more than one hour, refer to the thermal rating factor on page 17 to factor this into your selection.

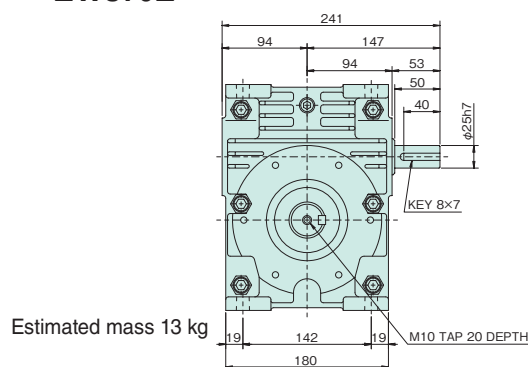


## Dimensional Drawings EWJ70E/EWJ70V/SWJ70E

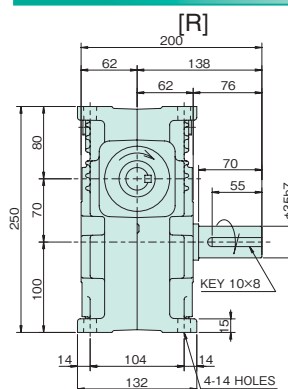
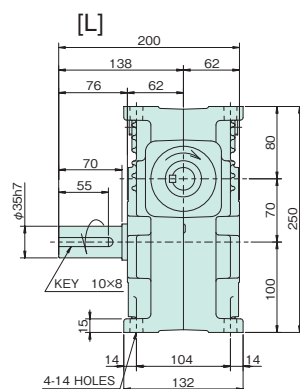
**See next page for reducers with motors**



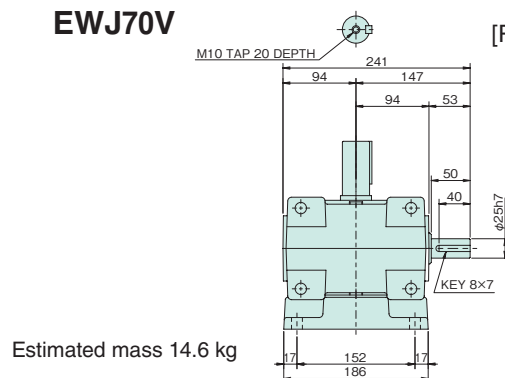
## EWJ70E



Estimated mass 13 kg

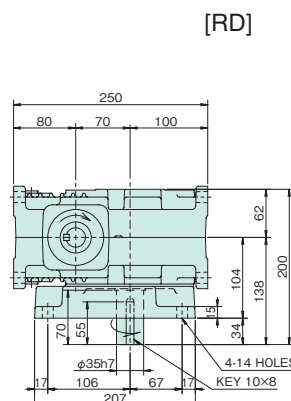
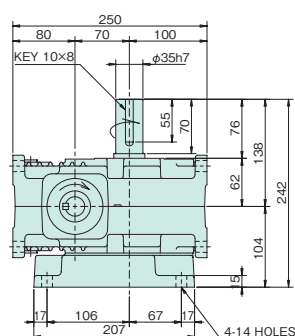


## EWJ70V



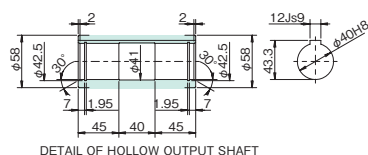
Estimated mass 14.6 kg

[RU]

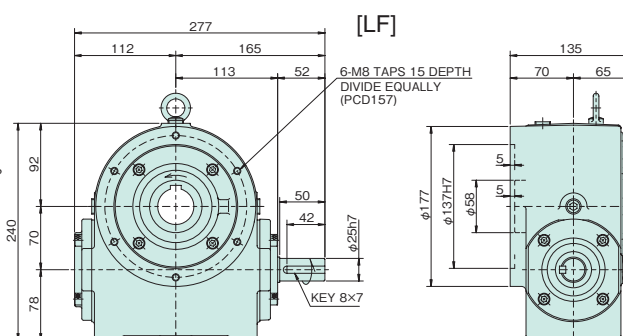


[RD]

## SWJ70E



### DETAIL OF HOLLOW OUTPUT SHAFT



Estimated mass 21 kg

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

| Size  | Input           | 1750 r/min |                           | 1450 r/min |                           | 1150 r/min |                           | 950 r/min |                           | 500 r/min |                           | 100 r/min |                           |
|-------|-----------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
|       | Reduction ratio | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} |
| EWJ70 | 10              | 4.28       | 214 {21.9}                | 3.85       | 231 {23.6}                | 3.51       | 263 {26.8}                | 3.16      | 284 {29.0}                | 1.96      | 324 {33.1}                | 0.42      | 324 {33.1}                |
|       | 15              | 3.09       | 225 {22.9}                | 2.80       | 242 {24.7}                | 2.54       | 273 {27.9}                | 2.29      | 295 {30.1}                | 1.38      | 324 {33.1}                | 0.30      | 324 {33.1}                |
|       | 20              | 2.50       | 235 {24.0}                | 2.26       | 254 {25.9}                | 2.05       | 285 {29.1}                | 1.86      | 309 {31.5}                | 1.08      | 324 {33.1}                | 0.24      | 324 {33.1}                |
|       | 25              | 2.12       | 243 {24.8}                | 1.92       | 263 {26.8}                | 1.74       | 294 {30.0}                | 1.56      | 314 {32.0}                | 0.89      | 324 {33.1}                | 0.20      | 324 {33.1}                |
|       | 30              | 1.80       | 236 {24.0}                | 1.64       | 255 {26.0}                | 1.49       | 284 {29.0}                | 1.36      | 308 {31.4}                | 0.81      | 324 {33.1}                | 0.19      | 324 {33.1}                |
|       | 40              | 1.45       | 241 {24.6}                | 1.35       | 265 {27.0}                | 1.22       | 295 {30.1}                | 1.11      | 315 {32.2}                | 0.65      | 324 {33.1}                | 0.15      | 324 {33.1}                |
|       | 50              | 1.18       | 235 {23.9}                | 1.10       | 258 {26.3}                | 0.99       | 283 {28.9}                | 0.89      | 302 {30.8}                | 0.55      | 324 {33.1}                | 0.13      | 324 {33.1}                |
|       | 60              | 0.97       | 222 {22.7}                | 0.90       | 243 {24.8}                | 0.81       | 266 {27.1}                | 0.73      | 282 {28.8}                | 0.46      | 311 {31.7}                | 0.11      | 311 {31.8}                |
| SWJ70 | 10              | 3.14       | 157 {16.0}                | 2.94       | 176 {18.0}                | 2.62       | 196 {20.0}                | 2.35      | 211 {21.6}                | 1.62      | 268 {27.4}                | 0.39      | 300 {30.6}                |
|       | 15              | 2.43       | 176 {18.0}                | 2.27       | 197 {20.1}                | 1.95       | 210 {21.5}                | 1.76      | 227 {23.1}                | 1.18      | 276 {28.1}                | 0.30      | 317 {32.3}                |
|       | 20              | 2.03       | 191 {19.5}                | 1.94       | 217 {22.2}                | 1.63       | 227 {23.1}                | 1.48      | 245 {25.0}                | 0.92      | 277 {28.2}                | 0.23      | 310 {31.6}                |
|       | 25              | 1.71       | 196 {20.0}                | 1.56       | 213 {21.7}                | 1.38       | 233 {23.8}                | 1.25      | 252 {25.7}                | 0.72      | 263 {26.8}                | 0.19      | 301 {30.7}                |
|       | 30              | 1.45       | 190 {19.4}                | 1.36       | 212 {21.6}                | 1.24       | 236 {24.1}                | 1.12      | 254 {25.9}                | 0.71      | 283 {28.9}                | 0.18      | 317 {32.3}                |
|       | 40              | 1.20       | 200 {20.4}                | 1.13       | 222 {22.7}                | 1.00       | 242 {24.7}                | 0.91      | 259 {26.4}                | 0.58      | 292 {29.8}                | 0.15      | 316 {32.2}                |
|       | 50              | 0.97       | 194 {19.8}                | 0.91       | 214 {21.8}                | 0.81       | 233 {23.7}                | 0.73      | 248 {25.3}                | 0.46      | 273 {27.9}                | 0.12      | 294 {30.0}                |
|       | 60              | 0.80       | 184 {18.8}                | 0.75       | 201 {20.6}                | 0.66       | 218 {22.3}                | 0.60      | 232 {23.6}                | 0.38      | 253 {25.9}                | 0.10      | 276 {28.2}                |

When running a speed within the shaded boxes , and also continuously for more than one hour, refer to the thermal rating factor on page 17 to factor this into your selection.



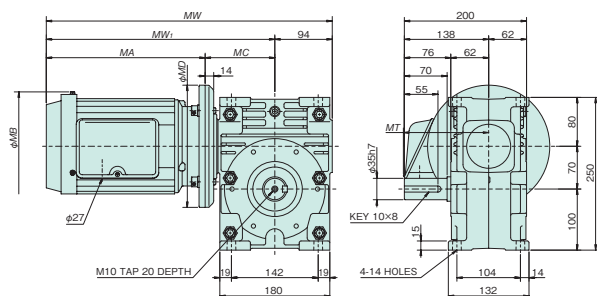
## Dimensional Drawings EWJMR70E/EWJMR70V/SWJMR70E



See previous page for reducers without motors

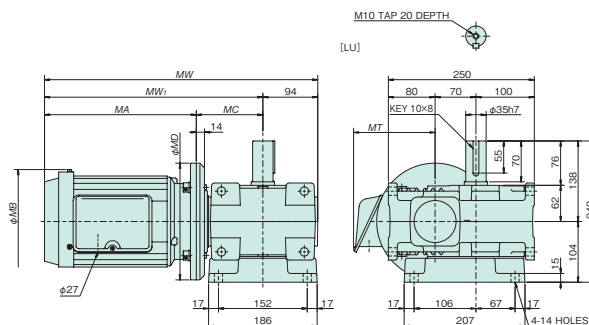
## EWJMR70E

[R]

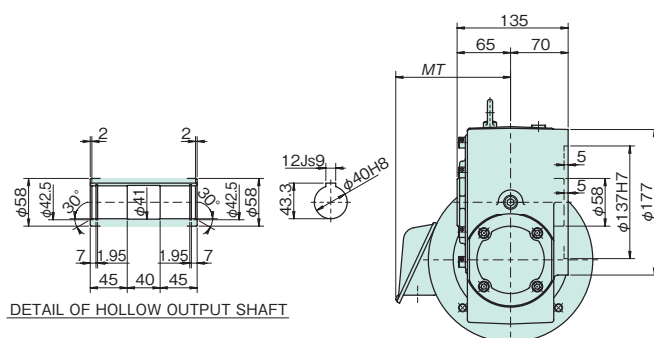


## EWJMR70V

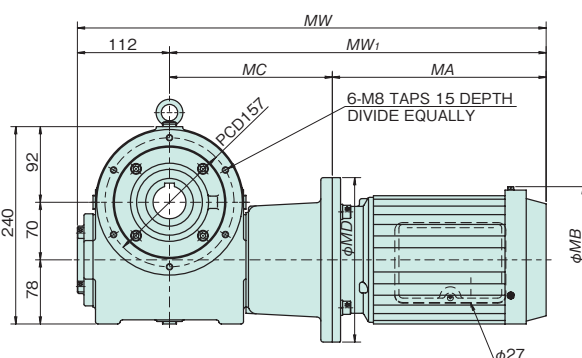
[LU]



## SWJMR70E



[LF]



## Transfer Capacity Table

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

| Size    | Standard combination |                 | 1750 r/min                | 1450 r/min                | Values in ( ) for the motor indicates dimensions for a motor with a brake. |              |                 |              |              |              |                |                             |                             |
|---------|----------------------|-----------------|---------------------------|---------------------------|----------------------------------------------------------------------------|--------------|-----------------|--------------|--------------|--------------|----------------|-----------------------------|-----------------------------|
|         | Motor kW             | Reduction ratio | Output torque N·m {kgf·m} | Output torque N·m {kgf·m} | MA                                                                         | MC           | MW <sub>1</sub> | MW           | MB           | MD           | MT             | E type<br>Estimated mass kg | V type<br>Estimated mass kg |
| EWJMR70 | 0.75                 | 40              | 125 {12.7}                | 148 {15.1}                | 260<br>(305)                                                               | 114<br>(114) | 374<br>(419)    | 468<br>(513) | 178<br>(178) | 200<br>(200) | 140<br>(140.0) | 28<br>(31)                  | 29<br>(32)                  |
|         |                      | 50              | 150 {15.3}                | 176 {18.0}                |                                                                            |              |                 |              |              |              |                |                             |                             |
|         |                      | 60              | 172 {17.6}                | 203 {20.7}                |                                                                            |              |                 |              |              |              |                |                             |                             |
|         | 1.5                  | 25              | 172 {17.6}                | 205 {20.9}                | 296<br>(360)                                                               | 114<br>(114) | 410<br>(474)    | 504<br>(568) | 204<br>(178) | 200<br>(200) | 158<br>(140.0) | 37<br>(42)                  | 39<br>(44)                  |
|         |                      | 30              | 197 {20.1}                | 233 {23.8}                |                                                                            |              |                 |              |              |              |                |                             |                             |
|         | 2.2                  | 10              | 110 {11.2}                | 132 {13.5}                | 318<br>(374)                                                               | 114<br>(114) | 432<br>(488)    | 526<br>(582) | 218<br>(226) | 250<br>(250) | 169<br>(166.0) | 48<br>(53)                  | 50<br>(55)                  |
|         |                      | 15              | 160 {16.3}                | 191 {19.4}                |                                                                            |              |                 |              |              |              |                |                             |                             |
|         |                      | 20              | 207 {21.1}                | 247 {25.2}                |                                                                            |              |                 |              |              |              |                |                             |                             |
|         | SWJMR70              | 0.75            | 30                        | 98 {10.0}                 | 116 {11.9}                                                                 | 260<br>(305) | 198<br>(198)    | 458<br>(503) | 570<br>(615) | 178<br>(178) | 200<br>(200)   | 140<br>(140.0)              | 41<br>(44)                  |
| 40      |                      |                 | 125 {12.7}                | 148 {15.1}                |                                                                            |              |                 |              |              |              |                |                             |                             |
| 50      |                      |                 | 150 {15.3}                | 176 {18.0}                |                                                                            |              |                 |              |              |              |                |                             |                             |
| 60      |                      |                 | 172 {17.6}                | 201 {20.6}                |                                                                            |              |                 |              |              |              |                |                             |                             |
| 1.5     |                      | 15              | 109 {11.1}                | 130 {13.3}                | 296<br>(360)                                                               | 198<br>(198) | 494<br>(558)    | 606<br>(670) | 204<br>(202) | 200<br>(200) | 158<br>(155.0) | 51<br>(56)                  | —                           |
|         |                      | 20              | 141 {14.4}                | 168 {17.2}                |                                                                            |              |                 |              |              |              |                |                             |                             |
|         |                      | 25              | 172 {17.6}                | 205 {20.9}                |                                                                            |              |                 |              |              |              |                |                             |                             |
| 2.2     |                      | 10              | 110 {11.2}                | 132 {13.5}                | 318<br>(374)                                                               | 222<br>(222) | 540<br>(596)    | 652<br>(708) | 218<br>(226) | 250<br>(250) | 169<br>(166.0) | 61<br>(66)                  | —                           |

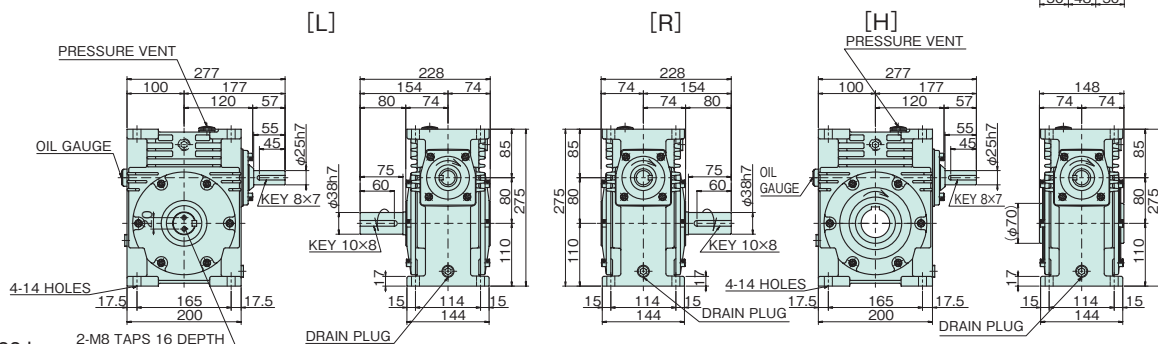
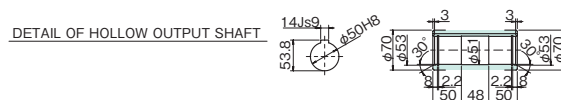
\* Motor/reducer combinations shown are standard.

\* Shaded boxes  indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.

\* Refer to page 17 for sizing.      \* Thermal rating factor is 1.0.

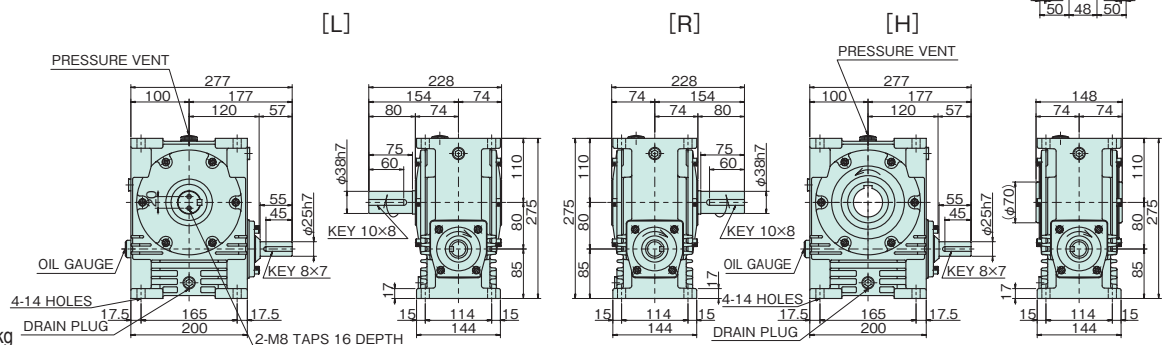
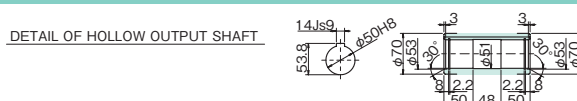
## Dimensional Drawings EW80T/EW80B/EW80V

### EW80T



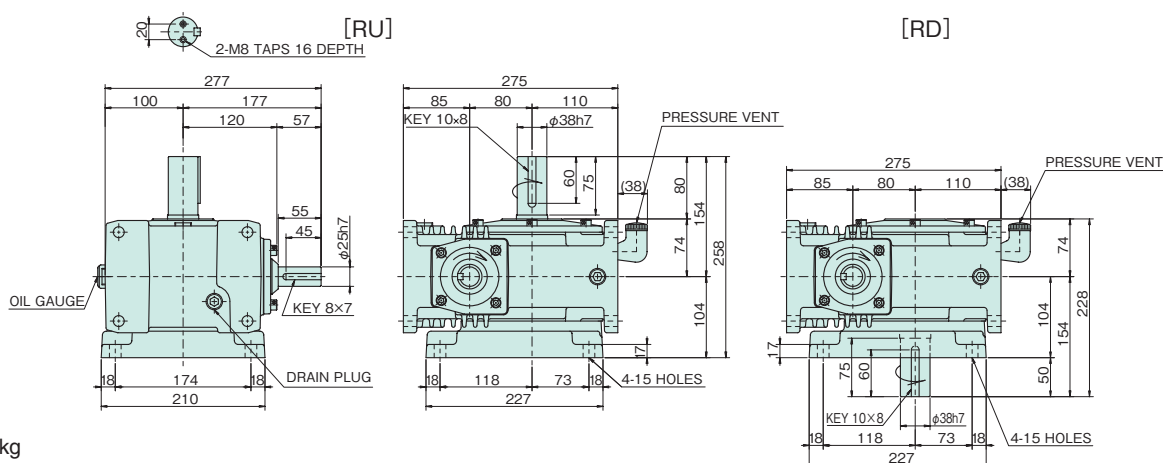
Estimated mass 28 kg

### EW80B



Estimated mass 27 kg

### EW80V



Estimated mass 30 kg

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

| Size | Input<br>Reduction<br>ratio | 1750 r/min  |                              | 1450 r/min  |                              | 1150 r/min  |                              | 950 r/min   |                              | 500 r/min   |                              | 100 r/min   |                              |
|------|-----------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|
|      |                             | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} |
| EW80 | 10                          | 6.52        | 329 {33.6}                   | 6.16        | 372 {38.0}                   | 5.52        | 417 {42.5}                   | 4.86        | 441 {45.0}                   | 2.83        | 474 {48.3}                   | 0.61        | 474 {48.3}                   |
|      | 15                          | 4.88        | 358 {36.5}                   | 4.53        | 397 {40.5}                   | 3.98        | 434 {44.3}                   | 3.52        | 459 {46.9}                   | 1.98        | 473 {48.3}                   | 0.44        | 474 {48.3}                   |
|      | 20                          | 3.88        | 370 {37.7}                   | 3.62        | 412 {42.0}                   | 3.18        | 449 {45.8}                   | 2.80        | 473 {48.3}                   | 1.55        | 473 {48.3}                   | 0.34        | 473 {48.3}                   |
|      | 25                          | 3.21        | 374 {38.1}                   | 2.99        | 414 {42.3}                   | 2.67        | 460 {46.9}                   | 2.31        | 474 {48.3}                   | 1.28        | 474 {48.3}                   | 0.29        | 474 {48.3}                   |
|      | 30                          | 2.77        | 371 {37.9}                   | 2.62        | 416 {42.4}                   | 2.30        | 451 {46.0}                   | 2.03        | 474 {48.3}                   | 1.14        | 474 {48.3}                   | 0.27        | 474 {48.3}                   |
|      | 40                          | 2.17        | 370 {37.8}                   | 2.05        | 413 {42.2}                   | 1.86        | 461 {47.0}                   | 1.62        | 473 {48.3}                   | 0.92        | 473 {48.3}                   | 0.22        | 474 {48.3}                   |
|      | 50                          | 1.76        | 361 {36.8}                   | 1.66        | 400 {40.8}                   | 1.50        | 443 {45.2}                   | 1.36        | 473 {48.3}                   | 0.78        | 474 {48.3}                   | 0.19        | 474 {48.3}                   |
|      | 60                          | 1.44        | 342 {34.9}                   | 1.35        | 376 {38.4}                   | 1.21        | 414 {42.3}                   | 1.07        | 429 {43.8}                   | 0.62        | 429 {43.8}                   | 0.15        | 430 {43.8}                   |

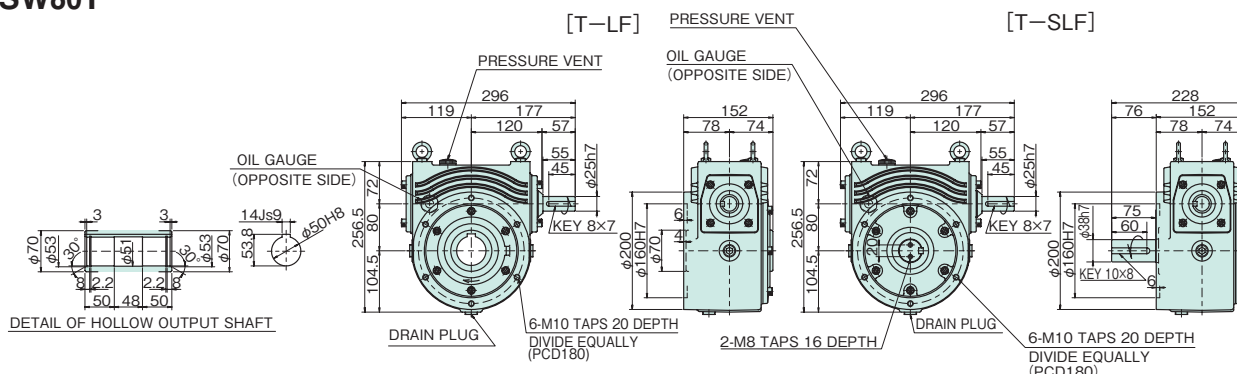
When running a speed within the shaded boxes, and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.

## Dimensional Drawings SW80T/SW80B/SW80V

See next page for  
reducers with motors

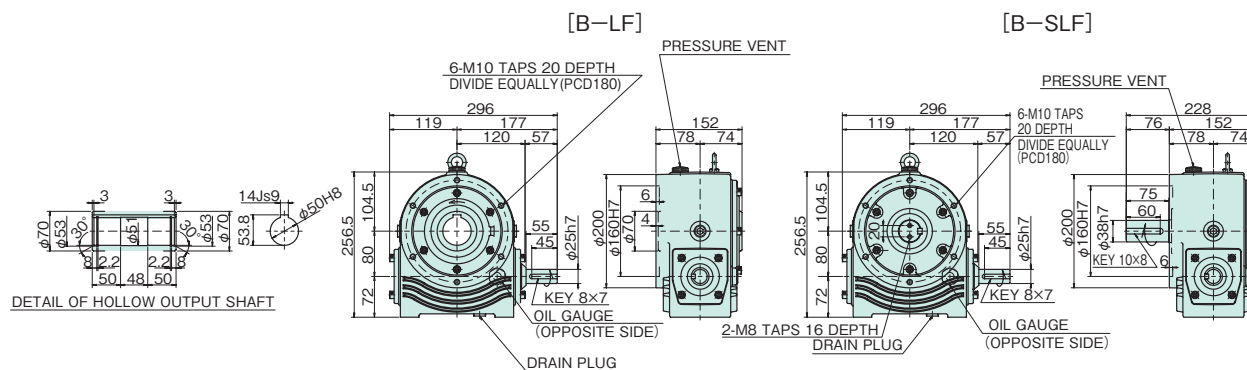


## SW80T



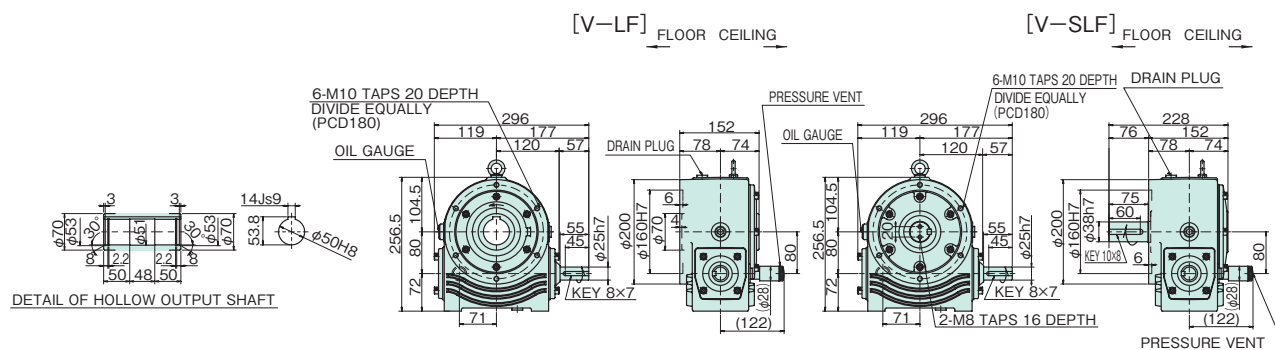
Estimated mass 26 kg

## SW80B



Estimated mass 26 kg

## SW80V



Estimated mass 26 kg

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

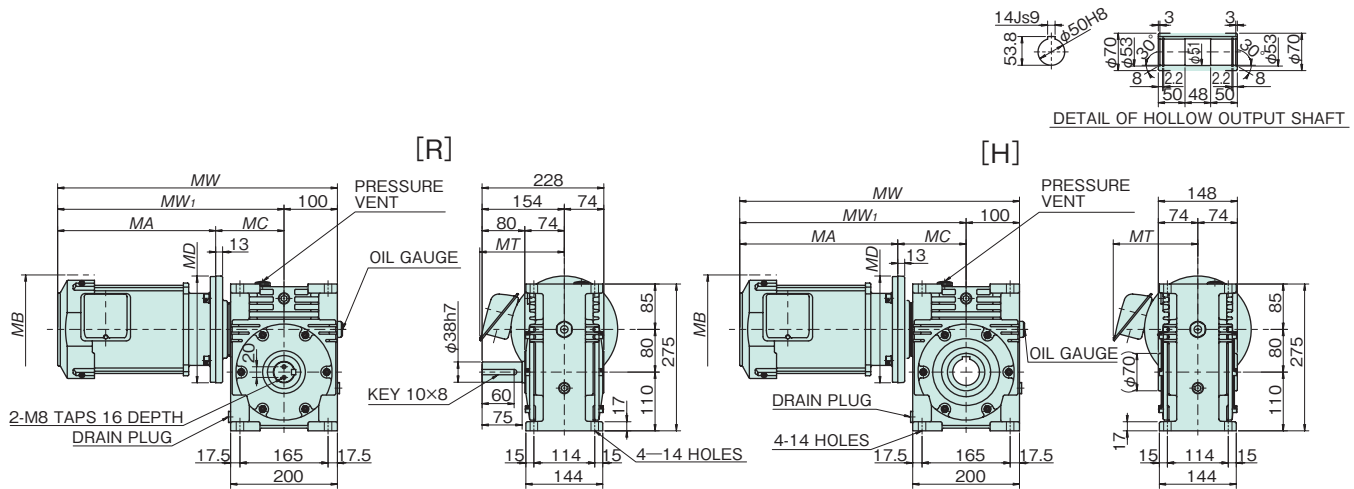
| Size | Input           | 1750 r/min |                           | 1450 r/min |                           | 1150 r/min |                           | 950 r/min |                           | 500 r/min |                           | 100 r/min |                           |
|------|-----------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
|      | Reduction ratio | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} |
| SW80 | 10              | 6.52       | 329 {33.6}                | 6.16       | 372 {38.0}                | 5.52       | 417 {42.5}                | 4.86      | 441 {45.0}                | 2.83      | 474 {48.3}                | 0.61      | 474 {48.3}                |
|      | 15              | 4.88       | 358 {36.5}                | 4.53       | 397 {40.5}                | 3.98       | 434 {44.3}                | 3.52      | 459 {46.9}                | 1.98      | 473 {48.3}                | 0.44      | 474 {48.3}                |
|      | 20              | 3.88       | 370 {37.7}                | 3.62       | 412 {42.0}                | 3.18       | 449 {45.8}                | 2.80      | 473 {48.3}                | 1.55      | 473 {48.3}                | 0.34      | 473 {48.3}                |
|      | 25              | 3.21       | 374 {38.1}                | 2.99       | 414 {42.3}                | 2.67       | 460 {46.9}                | 2.31      | 474 {48.3}                | 1.28      | 474 {48.3}                | 0.29      | 474 {48.3}                |
|      | 30              | 2.77       | 371 {37.9}                | 2.62       | 416 {42.4}                | 2.30       | 451 {46.0}                | 2.03      | 474 {48.3}                | 1.14      | 474 {48.3}                | 0.27      | 474 {48.3}                |
|      | 40              | 2.17       | 370 {37.8}                | 2.05       | 413 {42.2}                | 1.86       | 461 {47.0}                | 1.62      | 473 {48.3}                | 0.92      | 473 {48.3}                | 0.22      | 474 {48.3}                |
|      | 50              | 1.76       | 361 {36.8}                | 1.66       | 400 {40.8}                | 1.50       | 443 {45.2}                | 1.36      | 473 {48.3}                | 0.78      | 474 {48.3}                | 0.19      | 474 {48.3}                |
|      | 60              | 1.44       | 342 {34.9}                | 1.35       | 376 {38.4}                | 1.21       | 414 {42.3}                | 1.07      | 429 {43.8}                | 0.62      | 429 {43.8}                | 0.15      | 430 {43.8}                |

When running a speed within the shaded boxes , and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.

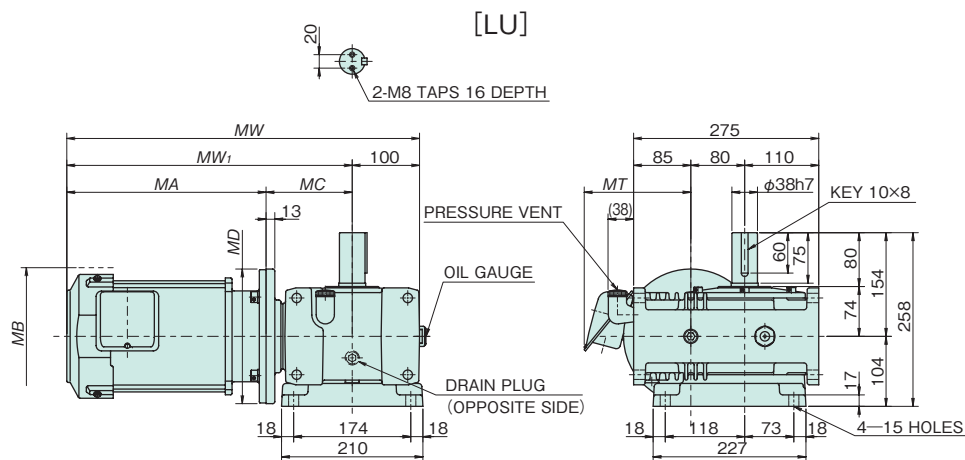
## Dimensional Drawings EWMR80T/EWMR80V

### EWMR80T

See previous page for reducers without motors



### EWMR80V



## Transfer Capacity Table

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

| Size   | Standard combination |                 | 1750 r/min                | 1450 r/min                | Values in ( ) for the motor indicates dimensions for a motor with a brake. |           |                 |           |           |           |             |                             |                             |
|--------|----------------------|-----------------|---------------------------|---------------------------|----------------------------------------------------------------------------|-----------|-----------------|-----------|-----------|-----------|-------------|-----------------------------|-----------------------------|
|        | Motor kW             | Reduction ratio | Output torque N·m {kgf·m} | Output torque N·m {kgf·m} | MA                                                                         | MC        | MW <sub>1</sub> | MW        | MB        | MD        | MT          | T type<br>Estimated mass kg | V type<br>Estimated mass kg |
| EWMR80 | 1.5                  | 40              | 256 {26.1}                | 302 {30.8}                | 296 (360)                                                                  | 128 (128) | 424 (488)       | 524 (588) | 204 (202) | 200 (200) | 158 (155.0) | 60 (65)                     | 62 (67)                     |
|        |                      | 50              | 307 {31.3}                | 362 {36.9}                |                                                                            |           |                 |           |           |           |             |                             |                             |
|        |                      | 60              | 342 {34.9}                | 376 {38.4}                |                                                                            |           |                 |           |           |           |             |                             |                             |
|        | 2.2                  | 25              | 256 {26.2}                | 305 {31.2}                | 318 (374)                                                                  | 128 (128) | 446 (502)       | 546 (602) | 218 (202) | 250 (250) | 169 (155.0) | 73 (78)                     | 75 (80)                     |
|        |                      | 30              | 295 {30.1}                | 350 {35.7}                |                                                                            |           |                 |           |           |           |             |                             |                             |
|        | 3.7                  | 10              | 187 {19.1}                | 224 {22.8}                | 343 (424)                                                                  | 128 (128) | 471 (552)       | 571 (652) | 237 (235) | 250 (250) | 181 (178.0) | 82 (92)                     | 84 (94)                     |
|        |                      | 15              | 272 {27.7}                | 325 {33.1}                |                                                                            |           |                 |           |           |           |             |                             |                             |
|        |                      | 20              | 353 {36.0}                | 412 {42.0}                |                                                                            |           |                 |           |           |           |             |                             |                             |

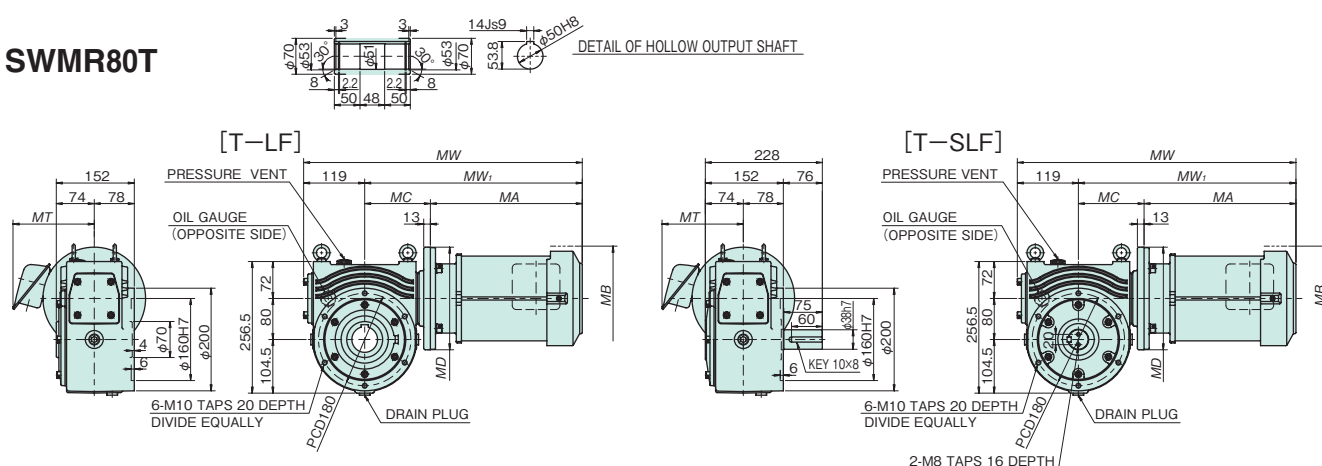
\* Motor/reducer combinations shown are standard.

\* Shaded boxes indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.

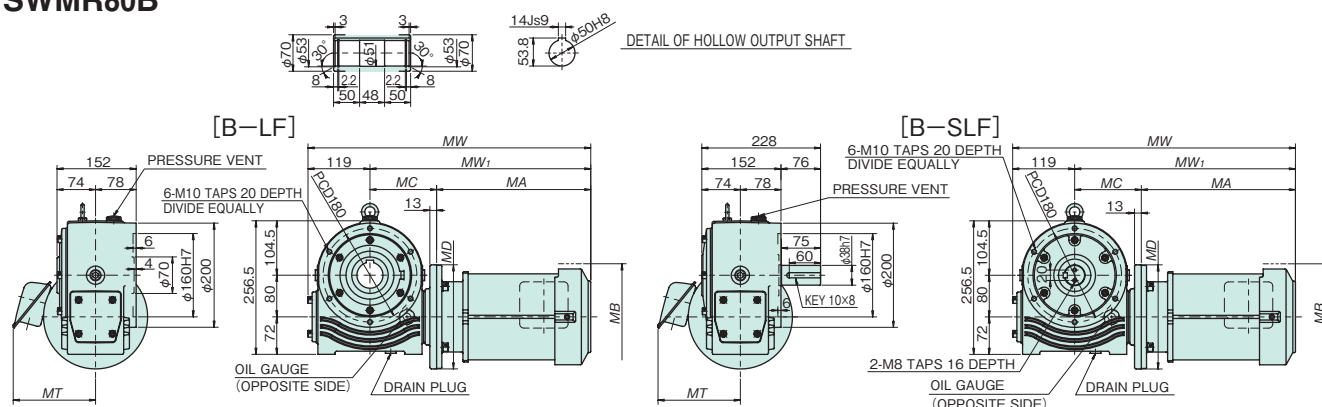
\* Refer to page 17 for sizing. \* Thermal rating factor is 1.0.

## Dimensional Drawings SWMR80T/SWMR80B/SWMR80V

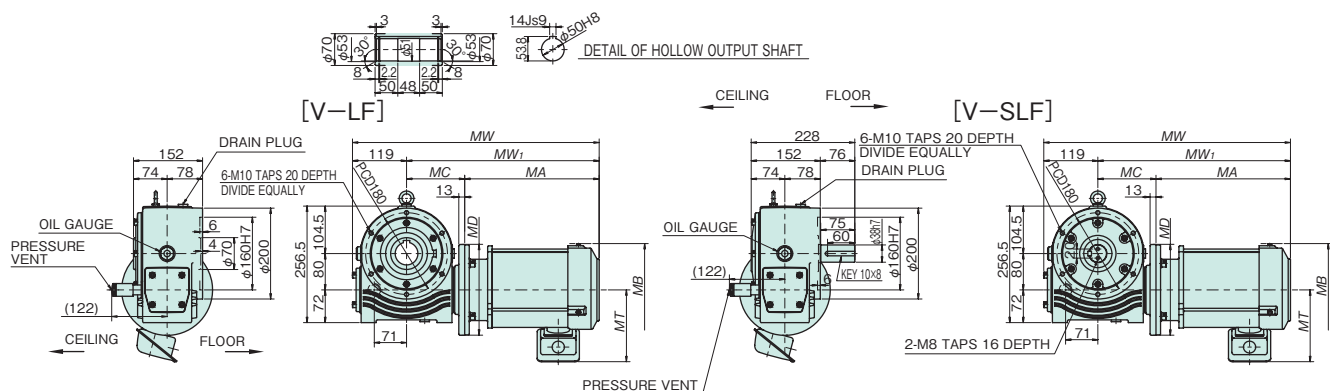
## SWMR80T



## SWMR80B



## SWMR80V



## Transfer Capacity Table

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

| Size   | Standard combination |                    | 1750 r/min                   | 1450 r/min                   | Values in ( ) for the motor indicates dimensions for a motor with a brake. |              |                 |              |              |              |                |                         |
|--------|----------------------|--------------------|------------------------------|------------------------------|----------------------------------------------------------------------------|--------------|-----------------|--------------|--------------|--------------|----------------|-------------------------|
|        | Motor<br>kW          | Reduction<br>ratio | Output torque<br>N·m {kgf·m} | Output torque<br>N·m {kgf·m} | MA                                                                         | MC           | MW <sub>I</sub> | MW           | MB           | MD           | MT             | Estimated<br>mass<br>kg |
| SWMR80 | 1.5                  | 40                 | 256 {26.1}                   | 302 {30.8}                   | 296<br>(360)                                                               | 128<br>(128) | 424<br>(488)    | 543<br>(607) | 204<br>(202) | 200<br>(200) | 158<br>(155.0) | 53<br>(58)              |
|        |                      | 50                 | 307 {31.3}                   | 362 {36.9}                   |                                                                            |              |                 |              |              |              |                |                         |
|        |                      | 60                 | 342 {34.9}                   | 376 {38.4}                   |                                                                            |              |                 |              |              |              |                |                         |
|        | 2.2                  | 20                 | 210 {21.4}                   | 250 {25.5}                   | 318<br>(374)                                                               | 128<br>(128) | 446<br>(502)    | 565<br>(621) | 218<br>(226) | 250<br>(250) | 169<br>(166.0) | 67<br>(72)              |
|        |                      | 25                 | 256 {26.2}                   | 305 {31.2}                   |                                                                            |              |                 |              |              |              |                |                         |
|        |                      | 30                 | 295 {30.1}                   | 350 {35.7}                   |                                                                            |              |                 |              |              |              |                |                         |
|        | 3.7                  | 10                 | 187 {19.1}                   | 224 {22.8}                   | 343<br>(424)                                                               | 128<br>(128) | 471<br>(552)    | 590<br>(671) | 237<br>(235) | 250<br>(250) | 181<br>(178.0) | 74<br>(84)              |
|        |                      | 15                 | 272 {27.7}                   | 325 {33.1}                   |                                                                            |              |                 |              |              |              |                |                         |
|        |                      | 20                 | 353 {36}                     | 412 {42}                     |                                                                            |              |                 |              |              |              |                |                         |

\* Motor/reducer combinations shown are standard.

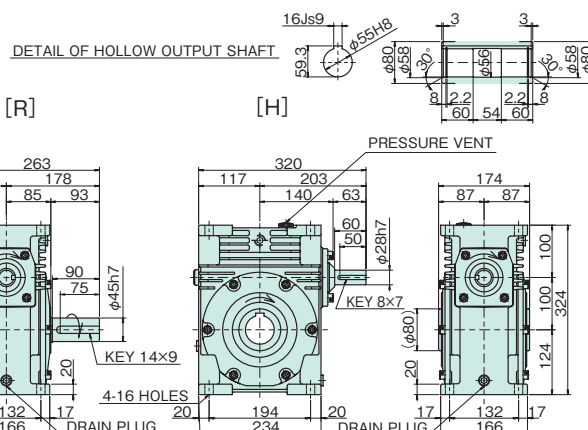
\* Shaded boxes  indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.

\* Refer to page 17 for sizing.

\* Thermal rating factor is 1.0.

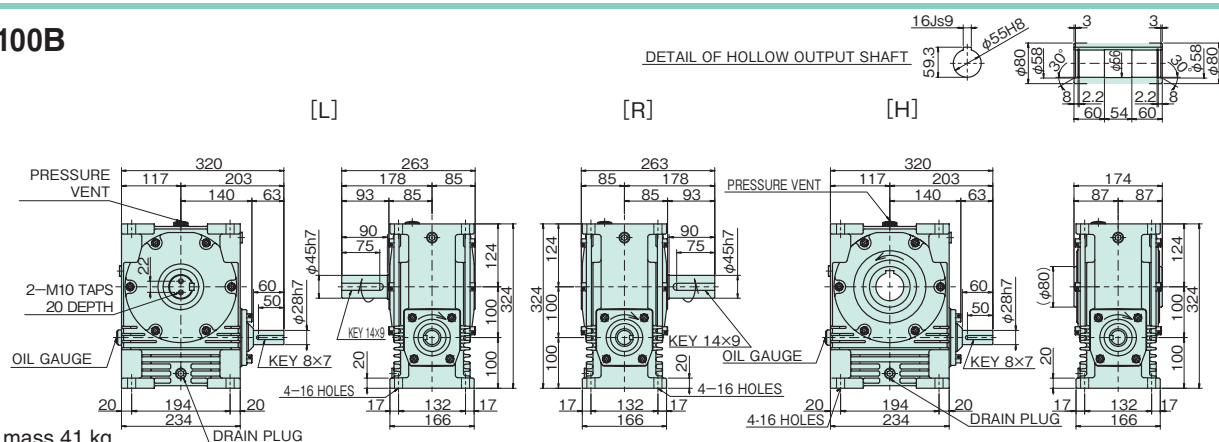


## EW100T



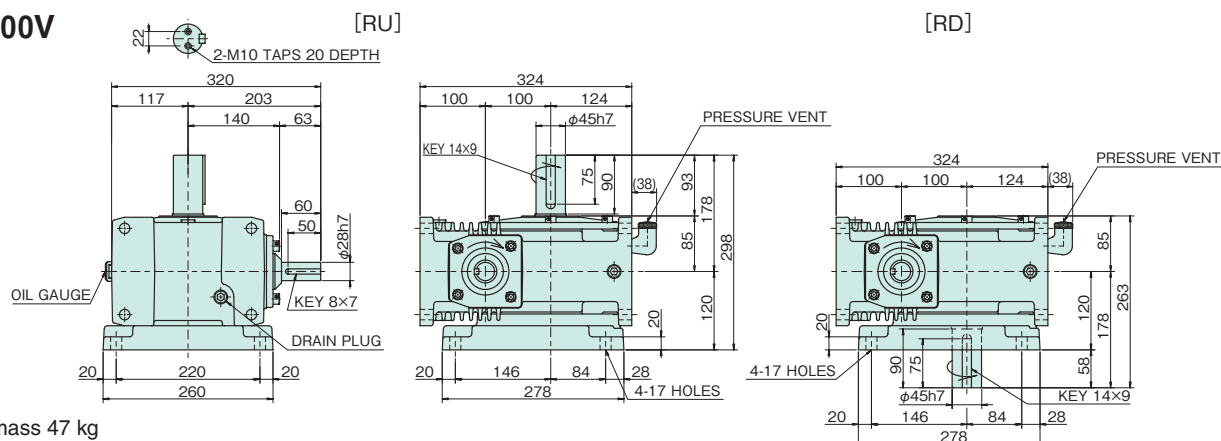
Estimated mass 43 kg

## EW100B



Estimated mass 41 kg

## EW100V



Estimated mass 47 kg

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

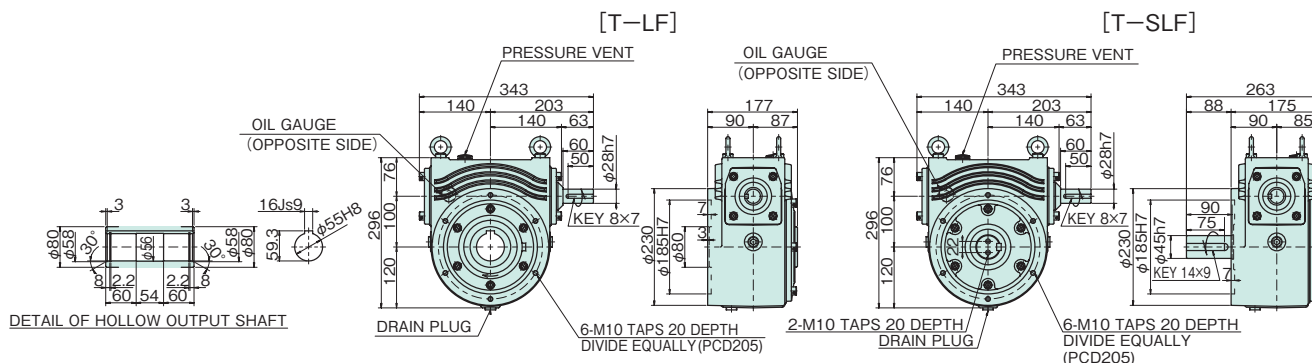
| Size  | Input           | 1750 r/min |                           | 1450 r/min |                           | 1150 r/min |                           | 950 r/min |                           | 500 r/min |                           | 100 r/min |                           |
|-------|-----------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
|       | Reduction ratio | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} |
| EW100 | 10              | 10.81      | 552 {56.3}                | 9.83       | 602 {61.4}                | 9.10       | 696 {71.1}                | 8.14      | 748 {76.3}                | 5.29      | 899 {91.8}                | 1.14      | 899 {91.8}                |
|       | 15              | 8.05       | 600 {61.2}                | 7.37       | 657 {67.1}                | 6.66       | 741 {75.6}                | 5.88      | 784 {80.0}                | 3.68      | 900 {91.8}                | 0.81      | 900 {91.8}                |
|       | 20              | 6.35       | 616 {62.8}                | 5.85       | 677 {69.1}                | 5.28       | 760 {77.5}                | 4.67      | 804 {82.0}                | 2.88      | 900 {91.8}                | 0.64      | 900 {91.8}                |
|       | 25              | 5.06       | 603 {61.5}                | 4.81       | 683 {69.7}                | 4.39       | 774 {79.0}                | 3.91      | 822 {83.9}                | 2.16      | 822 {83.9}                | 0.49      | 822 {83.9}                |
|       | 30              | 4.52       | 623 {63.6}                | 4.18       | 685 {69.9}                | 3.81       | 774 {78.9}                | 3.39      | 818 {83.5}                | 2.09      | 899 {91.8}                | 0.48      | 900 {91.8}                |
|       | 40              | 3.52       | 618 {63.1}                | 3.27       | 680 {69.4}                | 3.04       | 778 {79.4}                | 2.74      | 829 {84.6}                | 1.68      | 900 {91.8}                | 0.40      | 900 {91.8}                |
|       | 50              | 2.75       | 584 {59.6}                | 2.64       | 661 {67.5}                | 2.43       | 748 {76.3}                | 2.23      | 812 {82.9}                | 1.30      | 828 {84.5}                | 0.31      | 830 {84.7}                |
|       | 60              | 2.27       | 559 {57.1}                | 2.16       | 628 {64.1}                | 1.98       | 705 {72.0}                | 1.72      | 722 {73.6}                | 0.98      | 719 {73.4}                | 0.24      | 720 {73.5}                |

When running a speed within the shaded boxes , and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.

## Dimensional Drawings SW100T/SW100B/SW100V

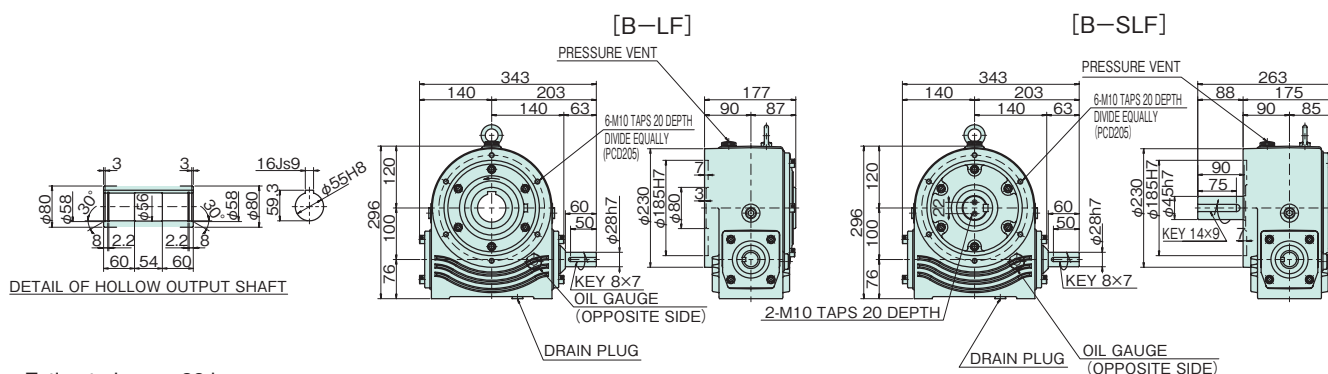
See next page for  
reducers with motors

## SW100T

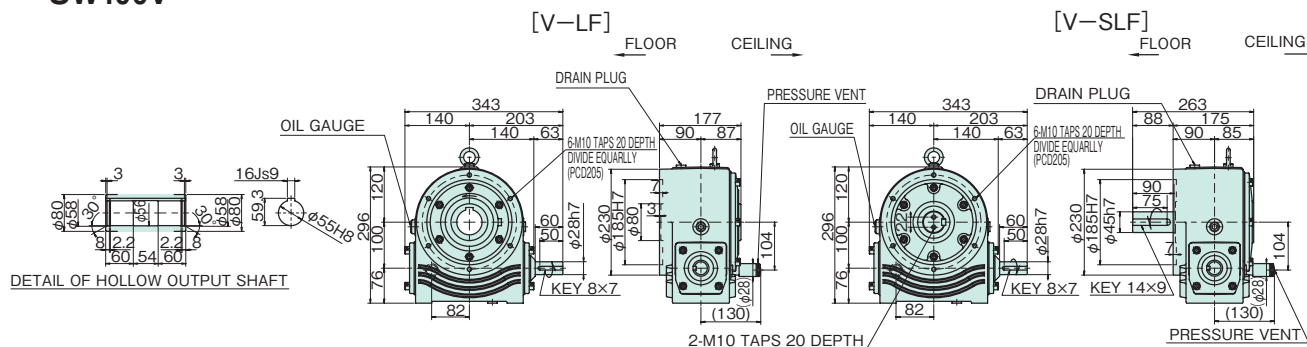


Estimated mass 38 kg

## SW100B



Estimated mass 38 kg

**SW100V**

Estimated mass 38 kg

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

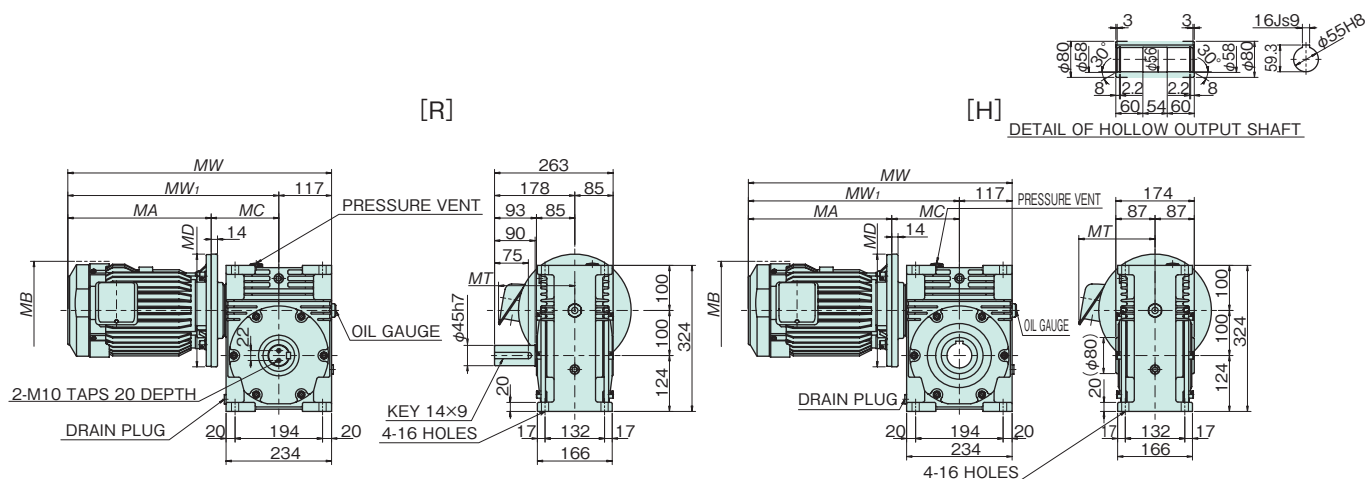
| Size  | Input           | 1750 r/min |                           | 1450 r/min |                           | 1150 r/min |                           | 950 r/min |                           | 500 r/min |                           | 100 r/min |                           |
|-------|-----------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
|       | Reduction ratio | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} |
| SW100 | 10              | 10.81      | 552 {56.3}                | 9.83       | 602 {61.4}                | 9.10       | 696 {71.1}                | 8.14      | 748 {76.3}                | 5.29      | 899 {91.8}                | 1.14      | 899 {91.8}                |
|       | 15              | 8.05       | 600 {61.2}                | 7.37       | 657 {67.1}                | 6.66       | 741 {75.6}                | 5.88      | 784 {80.0}                | 3.68      | 900 {91.8}                | 0.81      | 900 {91.8}                |
|       | 20              | 6.35       | 616 {62.8}                | 5.85       | 677 {69.1}                | 5.28       | 760 {77.5}                | 4.67      | 804 {82.0}                | 2.88      | 900 {91.8}                | 0.64      | 900 {91.8}                |
|       | 25              | 5.06       | 603 {61.5}                | 4.81       | 683 {69.7}                | 4.39       | 774 {79.0}                | 3.91      | 822 {83.9}                | 2.16      | 822 {83.9}                | 0.49      | 822 {83.9}                |
|       | 30              | 4.52       | 623 {63.6}                | 4.18       | 685 {69.9}                | 3.81       | 774 {78.9}                | 3.39      | 818 {83.5}                | 2.09      | 899 {91.8}                | 0.48      | 900 {91.8}                |
|       | 40              | 3.52       | 618 {63.1}                | 3.27       | 680 {69.4}                | 3.04       | 778 {79.4}                | 2.74      | 829 {84.6}                | 1.68      | 900 {91.8}                | 0.40      | 900 {91.8}                |
|       | 50              | 2.75       | 584 {59.6}                | 2.64       | 661 {67.5}                | 2.43       | 748 {76.3}                | 2.23      | 812 {82.9}                | 1.30      | 828 {84.5}                | 0.31      | 830 {84.7}                |
|       | 60              | 2.27       | 559 {57.1}                | 2.16       | 628 {64.1}                | 1.98       | 705 {72.0}                | 1.72      | 722 {73.6}                | 0.98      | 719 {73.4}                | 0.24      | 720 {73.5}                |

When running a speed within the shaded boxes , and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.

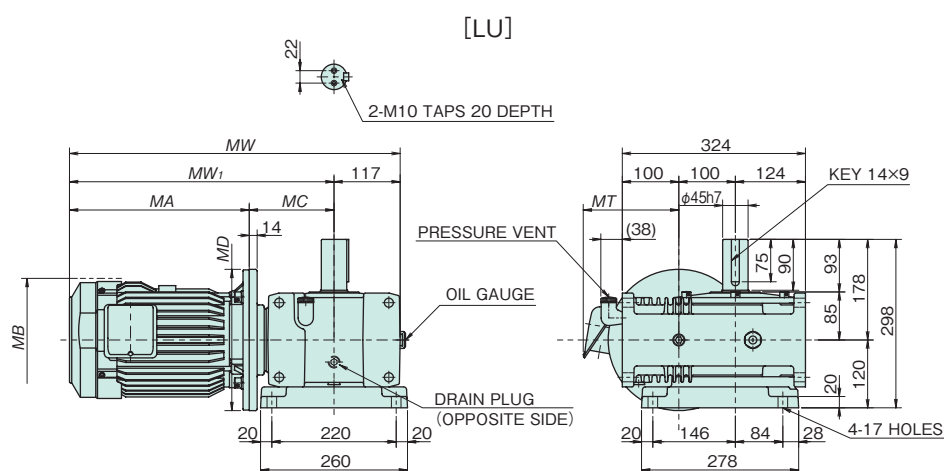
## Dimensional Drawings EWMR100T/EWMR100V



# EWMR100T



## EWMR100V



## Transfer Capacity Table

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

| Size    | Standard combination |                 | 1750 r/min                | 1450 r/min                | Values in ( ) for the motor indicates dimensions for a motor with a brake. |              |                 |              |              |              |                |                                |                                |
|---------|----------------------|-----------------|---------------------------|---------------------------|----------------------------------------------------------------------------|--------------|-----------------|--------------|--------------|--------------|----------------|--------------------------------|--------------------------------|
|         | Motor kW             | Reduction ratio | Output torque N·m {kgf·m} | Output torque N·m {kgf·m} | MA                                                                         | MC           | MW <sub>1</sub> | MW           | MB           | MD           | MT             | T type<br>Estimated mass<br>kg | V type<br>Estimated mass<br>kg |
| EWMR100 | 2.2                  | 40              | 386 {39.4}                | 457 {46.7}                | 318<br>(374)                                                               | 150<br>(150) | 468<br>(524)    | 585<br>(641) | 218<br>(226) | 250<br>(250) | 169<br>(166.0) | 85<br>(90)                     | 90<br>(95)                     |
|         |                      | 50              | 467 {47.6}                | 552 {56.3}                |                                                                            |              |                 |              |              |              |                |                                |                                |
|         |                      | 60              | 543 {55.4}                | 628 {64.1}                |                                                                            |              |                 |              |              |              |                |                                |                                |
|         | 3.7                  | 25              | 440 {44.9}                | 525 {53.6}                | 343<br>(424)                                                               | 150<br>(150) | 493<br>(574)    | 610<br>(691) | 237<br>(226) | 250<br>(250) | 181<br>(166.0) | 94<br>(104)                    | 99<br>(109)                    |
|         |                      | 30              | 510 {52.1}                | 607 {61.9}                |                                                                            |              |                 |              |              |              |                |                                |                                |
|         | 5.5                  | 10              | 281 {28.6}                | 337 {34.3}                | 402<br>(475)                                                               | 157<br>(157) | 559<br>(632)    | 676<br>(749) | 277<br>(275) | 300<br>(300) | 197<br>(200.0) | 116<br>(128)                   | 121<br>(133)                   |
|         |                      | 15              | 410 {41.8}                | 491 {50.1}                |                                                                            |              |                 |              |              |              |                |                                |                                |
|         |                      | 20              | 533 {54.4}                | 637 {65.0}                |                                                                            |              |                 |              |              |              |                |                                |                                |

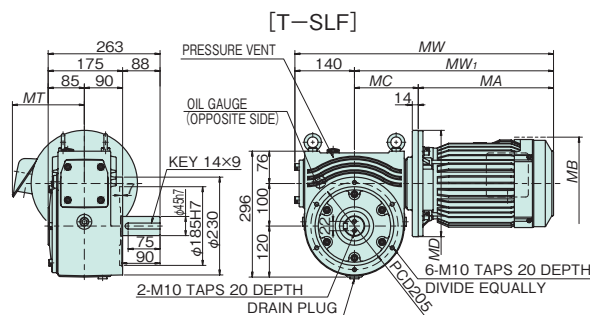
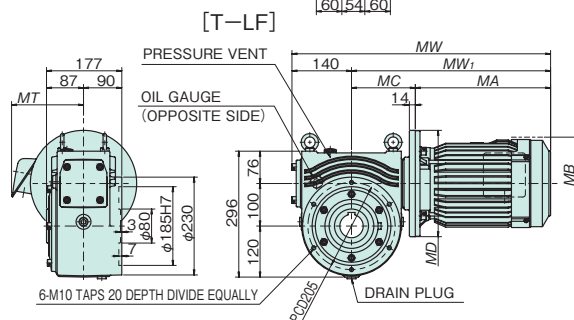
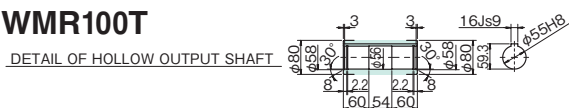
\* Motor/reducer combinations shown are standard.

\* Shaded boxes  indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.

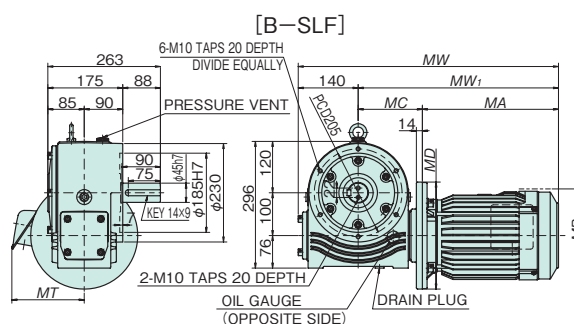
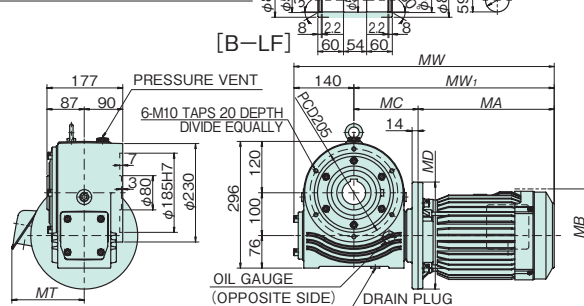
\* Refer to page 17 for sizing.      \* Thermal rating factor is 1.0.

## Dimensional Drawings SWMR100T/SWMR100B/SWMR100V

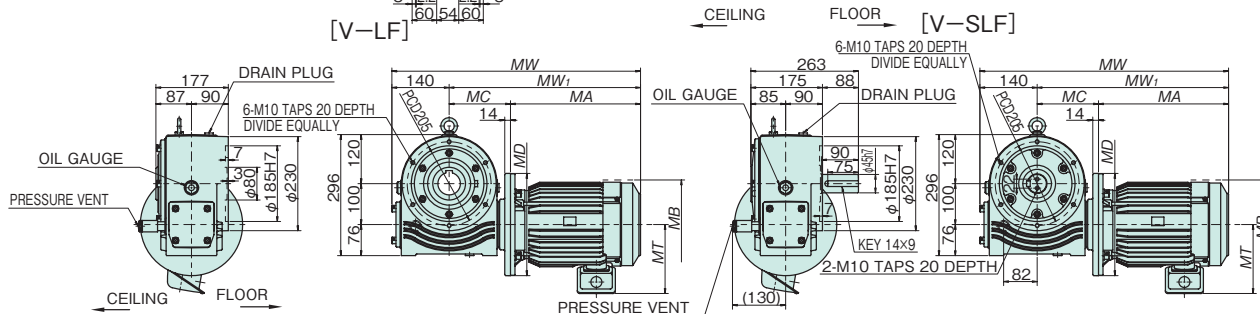
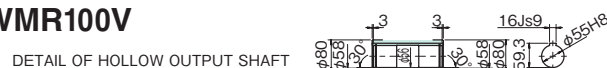
## SWMR100T



# SWMR100B



## SWMR100V



## Transfer Capacity Table

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

| Size    | Standard combination |                 | 1750 r/min                | 1450 r/min                | Values in ( ) for the motor indicates dimensions for a motor with a brake. |              |                 |              |              |              |                |                   |
|---------|----------------------|-----------------|---------------------------|---------------------------|----------------------------------------------------------------------------|--------------|-----------------|--------------|--------------|--------------|----------------|-------------------|
|         | Motor kW             | Reduction ratio | Output torque N·m {kgf·m} | Output torque N·m {kgf·m} | MA                                                                         | MC           | MW <sub>1</sub> | MW           | MB           | MD           | MT             | Estimated mass kg |
| SWMR100 | 2.2                  | 40              | 386 {39.4}                | 457 {46.7}                | 318<br>(374)                                                               | 150<br>(150) | 468<br>(524)    | 608<br>(664) | 218<br>(226) | 250<br>(250) | 169<br>(166.0) | 80<br>(85)        |
|         |                      | 50              | 467 {47.6}                | 552 {56.3}                |                                                                            |              |                 |              |              |              |                |                   |
|         |                      | 60              | 543 {55.4}                | 628 {64.1}                |                                                                            |              |                 |              |              |              |                |                   |
|         | 3.7                  | 25              | 440 {44.9}                | 525 {53.6}                | 343<br>(424)                                                               | 150<br>(150) | 493<br>(574)    | 633<br>(714) | 237<br>(235) | 250<br>(250) | 181<br>(178.0) | 87<br>(97)        |
|         |                      | 30              | 510 {52.1}                | 607 {61.9}                |                                                                            |              |                 |              |              |              |                |                   |
|         | 5.5                  | 10              | 281 {28.6}                | 337 {34.3}                | 402<br>(475)                                                               | 157<br>(157) | 559<br>(632)    | 699<br>(772) | 277<br>(275) | 300<br>(300) | 197<br>(200.0) | 101<br>(113)      |
|         |                      | 15              | 410 {41.8}                | 491 {50.1}                |                                                                            |              |                 |              |              |              |                |                   |
|         |                      | 20              | 533 {54.4}                | 637 {65.0}                |                                                                            |              |                 |              |              |              |                |                   |

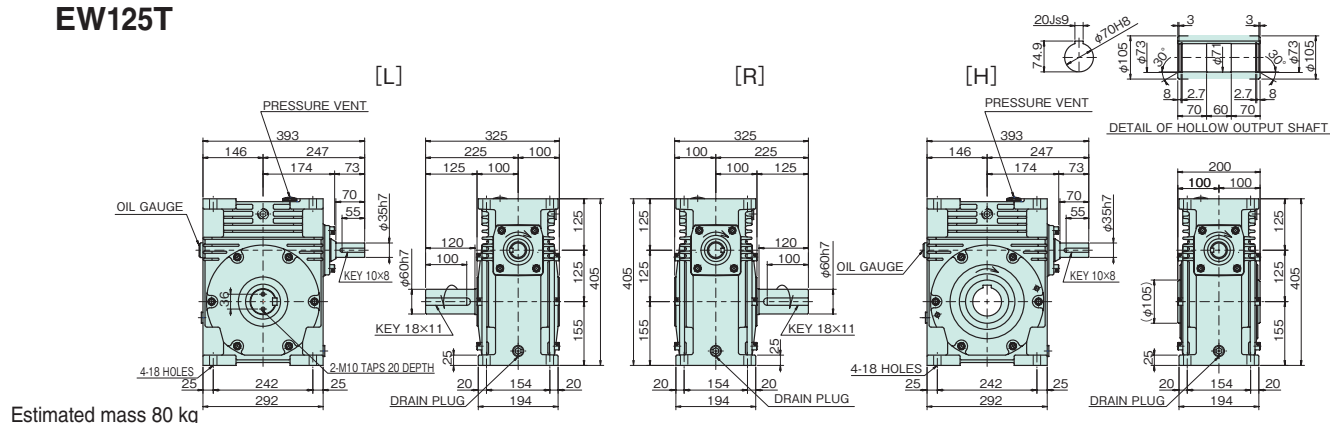
\* Motor/reducer combinations shown are standard.

\* Shaded boxes  indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.

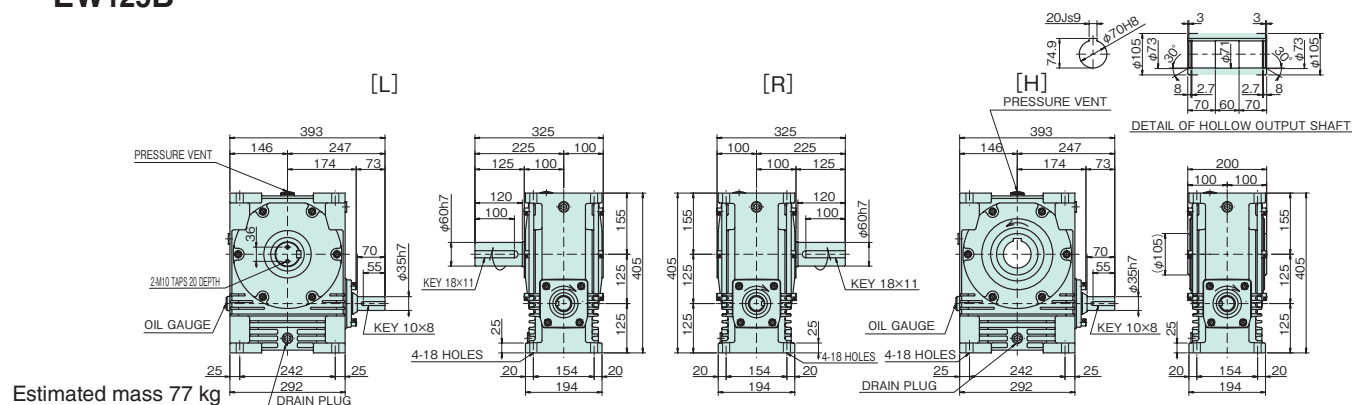
\* Refer to page 17 for sizing.      \* Thermal rating factor is 1.0.

## Dimensional Drawings EW125T/EW125B/EW125V

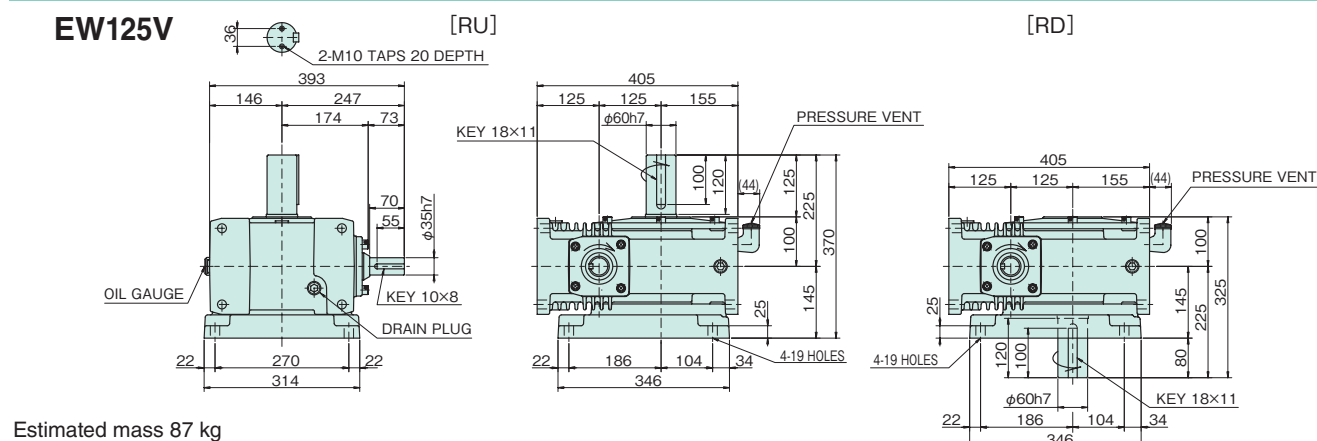
### EW125T



### EW125B



### EW125V



\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

| Size  | Input<br>Reduction<br>ratio | 1750 r/min  |                              | 1450 r/min  |                              | 1150 r/min  |                              | 950 r/min   |                              | 500 r/min   |                              | 100 r/min   |                              |
|-------|-----------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|
|       |                             | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} |
| EW125 | 10                          | 17.70       | 909 {92.7}                   | 16.42       | 1012 {103}                   | 14.66       | 1130 {115}                   | 13.80       | 1279 {131}                   | 9.55        | 1637 {167}                   | 2.14        | 1705 {174}                   |
|       | 15                          | 13.13       | 987 {101}                    | 12.20       | 1099 {112}                   | 10.98       | 1233 {126}                   | 10.32       | 1390 {142}                   | 6.90        | 1704 {174}                   | 1.52        | 1704 {174}                   |
|       | 20                          | 10.27       | 1011 {103}                   | 9.57        | 1126 {115}                   | 8.69        | 1274 {130}                   | 8.10        | 1420 {145}                   | 5.33        | 1704 {174}                   | 1.19        | 1704 {174}                   |
|       | 25                          | 8.46        | 1020 {104}                   | 7.64        | 1098 {112}                   | 7.20        | 1286 {131}                   | 6.70        | 1429 {146}                   | 4.27        | 1648 {168}                   | 0.96        | 1648 {168}                   |
|       | 30                          | 7.33        | 1025 {105}                   | 6.85        | 1141 {117}                   | 6.23        | 1285 {131}                   | 5.88        | 1444 {147}                   | 3.88        | 1704 {174}                   | 0.90        | 1705 {174}                   |
|       | 40                          | 5.63        | 1015 {104}                   | 5.28        | 1131 {115}                   | 4.85        | 1281 {131}                   | 4.55        | 1425 {145}                   | 3.07        | 1705 {174}                   | 0.73        | 1705 {174}                   |
|       | 50                          | 4.55        | 986 {101}                    | 4.15        | 1065 {109}                   | 3.95        | 1245 {127}                   | 3.71        | 1382 {141}                   | 2.54        | 1656 {169}                   | 0.62        | 1666 {170}                   |
|       | 60                          | 3.72        | 936 {95.5}                   | 3.42        | 1018 {104}                   | 3.25        | 1182 {121}                   | 3.04        | 1306 {133}                   | 1.91        | 1430 {146}                   | 0.47        | 1439 {147}                   |

When running a speed within the shaded boxes, and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.

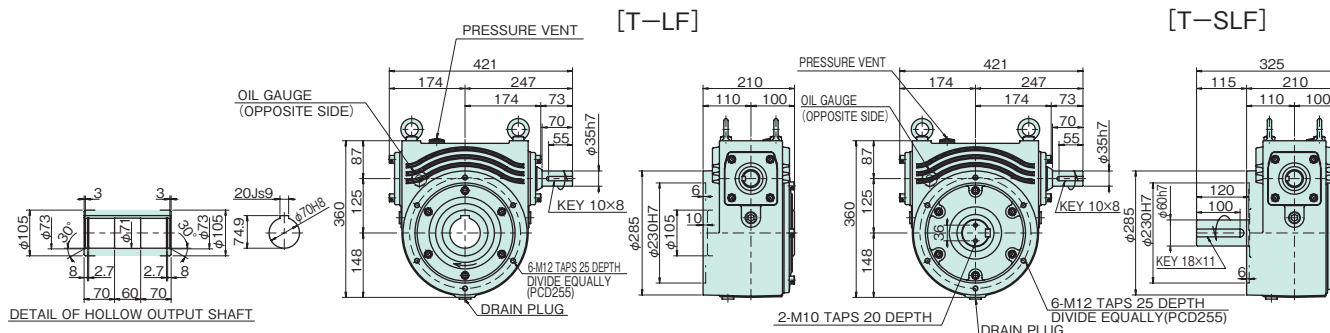


## Dimensional Drawings SW125T/SW125B/SW125V

See next page for  
reducers with motors

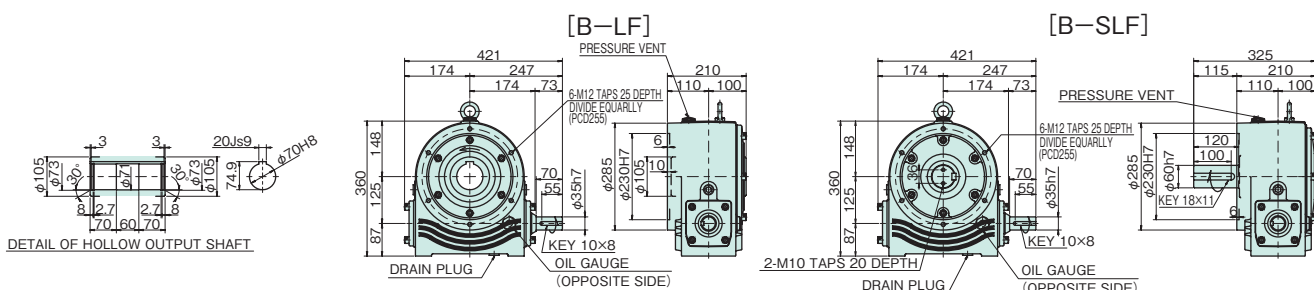


## SW125T



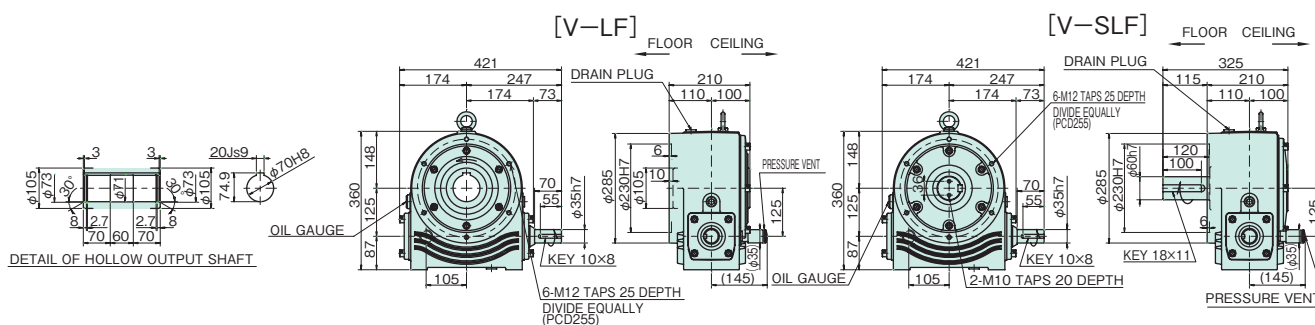
Estimated mass 72 kg

## SW125B



Estimated mass 72 kg

## SW125V



Estimated mass 72 kg

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

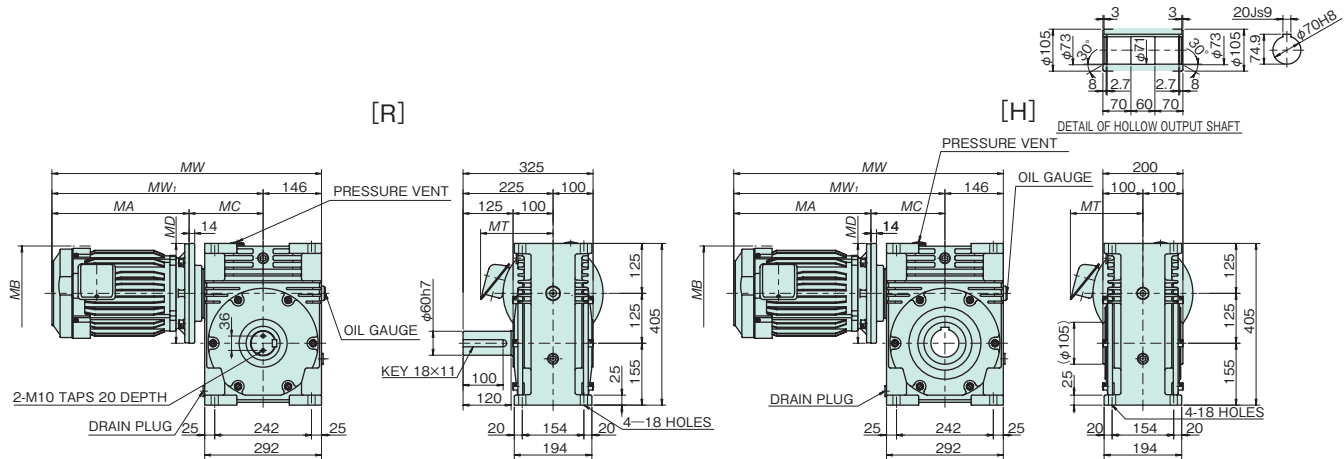
| Size  | Input           | 1750 r/min |                           | 1450 r/min |                           | 1150 r/min |                           | 950 r/min |                           | 500 r/min |                           | 100 r/min |                           |
|-------|-----------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
|       | Reduction ratio | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} |
| SW125 | 10              | 17.70      | 909 {92.7}                | 16.42      | 1012 {103}                | 14.66      | 1130 {115}                | 13.80     | 1279 {131}                | 9.55      | 1637 {167}                | 2.14      | 1705 {174}                |
|       | 15              | 13.13      | 987 {101}                 | 12.20      | 1099 {112}                | 10.98      | 1233 {126}                | 10.32     | 1390 {142}                | 6.90      | 1704 {174}                | 1.52      | 1704 {174}                |
|       | 20              | 10.27      | 1011 {103}                | 9.57       | 1126 {115}                | 8.69       | 1274 {130}                | 8.10      | 1420 {145}                | 5.33      | 1704 {174}                | 1.19      | 1704 {174}                |
|       | 25              | 8.46       | 1020 {104}                | 7.64       | 1098 {112}                | 7.20       | 1286 {131}                | 6.70      | 1429 {146}                | 4.27      | 1648 {168}                | 0.96      | 1648 {168}                |
|       | 30              | 7.33       | 1025 {105}                | 6.85       | 1141 {117}                | 6.23       | 1285 {131}                | 5.88      | 1444 {147}                | 3.88      | 1704 {174}                | 0.90      | 1705 {174}                |
|       | 40              | 5.63       | 1015 {104}                | 5.28       | 1131 {115}                | 4.85       | 1281 {131}                | 4.55      | 1425 {145}                | 3.07      | 1705 {174}                | 0.73      | 1705 {174}                |
|       | 50              | 4.55       | 986 {101}                 | 4.15       | 1065 {109}                | 3.95       | 1245 {127}                | 3.71      | 1382 {141}                | 2.54      | 1656 {169}                | 0.62      | 1666 {170}                |
|       | 60              | 3.72       | 936 {95.5}                | 3.42       | 1018 {104}                | 3.25       | 1182 {121}                | 3.04      | 1306 {133}                | 1.91      | 1430 {146}                | 0.47      | 1439 {147}                |

When running a speed within the shaded boxes , and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.

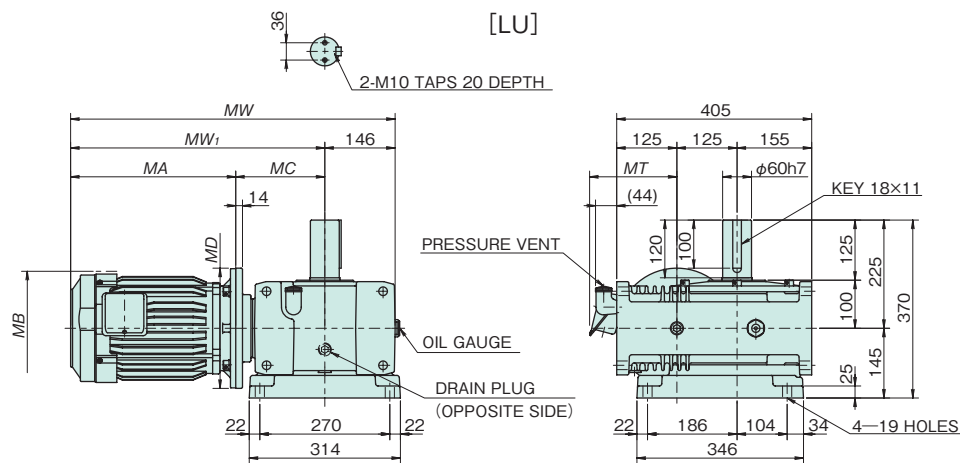
## Dimensional Drawings EWMR125T/EWMR125V



### EWMR125T



### EWMR125V



### Transfer Capacity Table

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

| Size    | Standard combination |                 | 1750 r/min                | 1450 r/min                | Values in ( ) for the motor indicates dimensions for a motor with a brake. |              |                 |              |              |              |                |                             |                             |
|---------|----------------------|-----------------|---------------------------|---------------------------|----------------------------------------------------------------------------|--------------|-----------------|--------------|--------------|--------------|----------------|-----------------------------|-----------------------------|
|         | Motor kW             | Reduction ratio | Output torque N·m {kgf·m} | Output torque N·m {kgf·m} | MA                                                                         | MC           | MW <sub>1</sub> | MW           | MB           | MD           | MT             | T type<br>Estimated mass kg | V type<br>Estimated mass kg |
| EWMR125 | 3.7                  | 40              | 667 {68.0}                | 792 {80.8}                | 343<br>(424)                                                               | 185<br>(185) | 528<br>(609)    | 674<br>(755) | 237<br>(235) | 250<br>(250) | 181<br>(178.0) | 134<br>(144)                | 141<br>(151)                |
|         |                      | 50              | 802 {81.8}                | 949 {96.8}                |                                                                            |              |                 |              |              |              |                |                             |                             |
|         |                      | 60              | 931 {95.0}                | 1018 {104}                |                                                                            |              |                 |              |              |              |                |                             |                             |
|         | 5.5                  | 25              | 662 {67.6}                | 791 {80.7}                | 402<br>(475)                                                               | 185<br>(185) | 587<br>(660)    | 733<br>(806) | 277<br>(235) | 300<br>(300) | 197<br>(178.0) | 156<br>(168)                | 163<br>(175)                |
|         |                      | 30              | 770 {78.5}                | 916 {93.5}                |                                                                            |              |                 |              |              |              |                |                             |                             |

\* Motor/reducer combinations shown are standard.

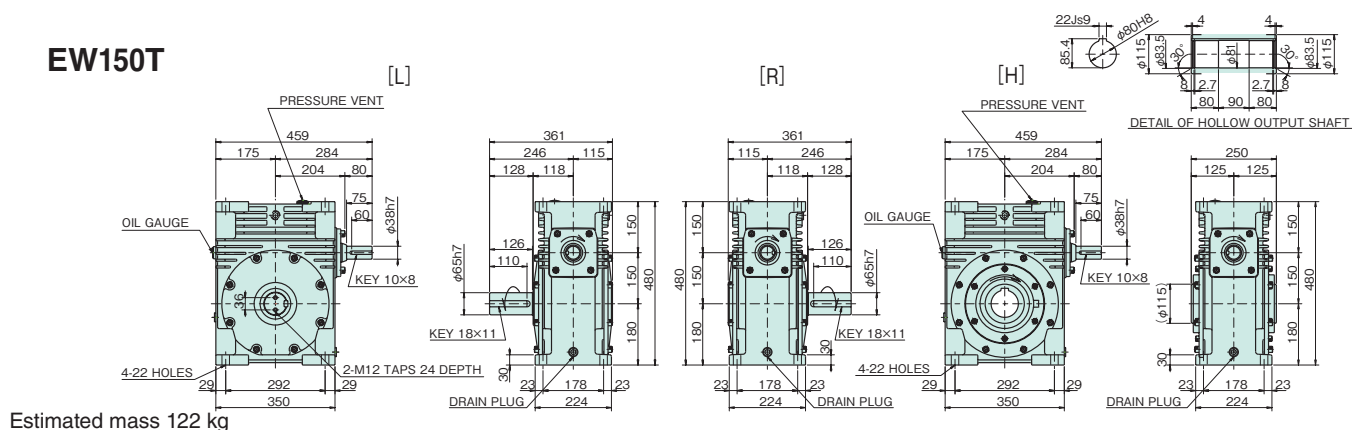
\* Shaded boxes indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.

\* Refer to page 17 for sizing. \* Thermal rating factor is 1.0.

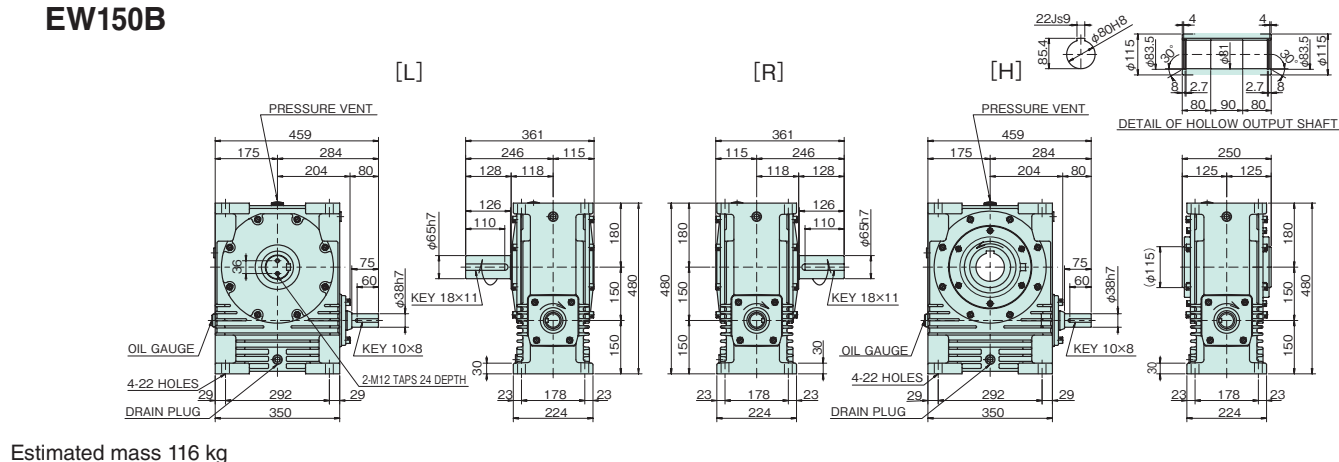


## Dimensional Drawings EW150T/EW150B/EW150V

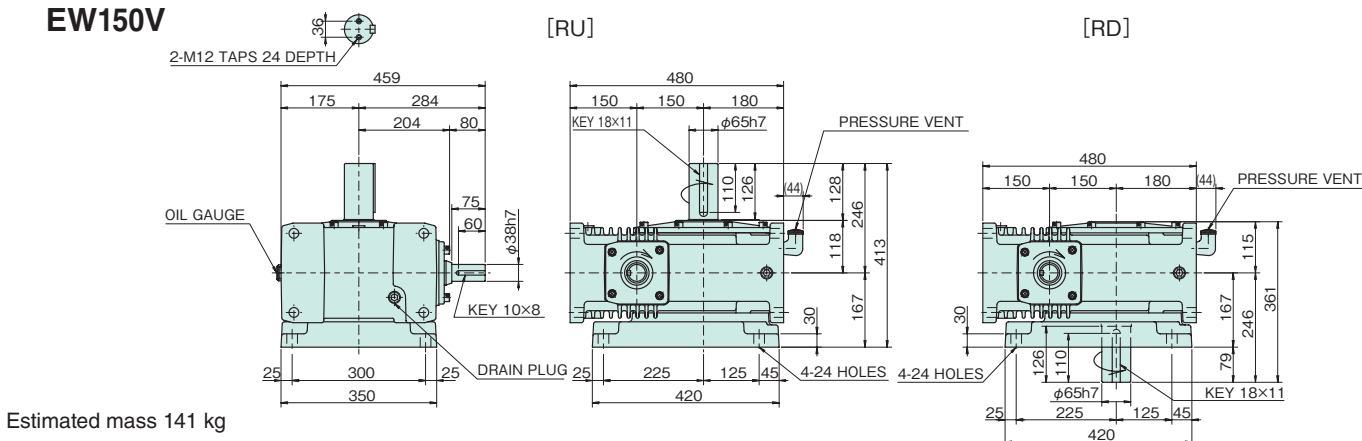
### EW150T



### EW150B



### EW150V



\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

| Size  | Input           | 1750 r/min |                           | 1450 r/min |                           | 1150 r/min |                           | 950 r/min |                           | 500 r/min |                           | 100 r/min |                           |
|-------|-----------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
|       | Reduction ratio | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} |
| EW150 | 10              | 26.45      | 1364 {139}                | 24.52      | 1519 {155}                | 22.36      | 1734 {177}                | 20.31     | 1894 {193}                | 14.51     | 2508 {256}                | 3.29      | 2646 {270}                |
|       | 15              | 19.58      | 1482 {151}                | 18.19      | 1650 {168}                | 16.62      | 1883 {192}                | 15.21     | 2068 {211}                | 10.41     | 2600 {265}                | 2.33      | 2646 {270}                |
|       | 20              | 15.33      | 1519 {155}                | 14.26      | 1691 {173}                | 12.65      | 1869 {191}                | 12.05     | 2134 {218}                | 8.19      | 2646 {270}                | 1.83      | 2646 {270}                |
|       | 25              | 12.45      | 1522 {155}                | 11.59      | 1695 {173}                | 10.48      | 1906 {195}                | 9.85      | 2143 {219}                | 6.69      | 2646 {270}                | 1.50      | 2646 {270}                |
|       | 30              | 10.87      | 1539 {157}                | 10.15      | 1713 {175}                | 9.35       | 1956 {200}                | 8.31      | 2074 {212}                | 5.42      | 2421 {247}                | 1.38      | 2646 {270}                |
|       | 40              | 8.36       | 1525 {156}                | 7.83       | 1698 {173}                | 7.03       | 1883 {192}                | 6.74      | 2144 {219}                | 4.69      | 2646 {270}                | 1.12      | 2646 {270}                |
|       | 50              | 6.62       | 1474 {151}                | 6.21       | 1642 {168}                | 5.68       | 1849 {189}                | 5.38      | 2077 {212}                | 3.89      | 2646 {270}                | 0.93      | 2646 {270}                |
|       | 60              | 5.43       | 1402 {143}                | 5.11       | 1561 {159}                | 4.69       | 1758 {179}                | 4.45      | 1974 {201}                | 3.31      | 2563 {262}                | 0.82      | 2586 {264}                |

When running a speed within the shaded boxes, and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.

# Dimensional Drawings SW150T/SW150B/SW150V

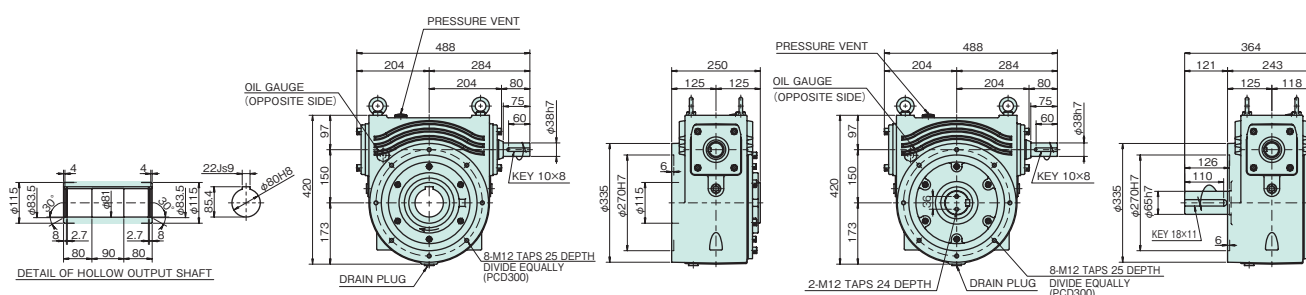
See next page for  
reducers with motors



## SW150T

[T-LF]

[T-SLF]

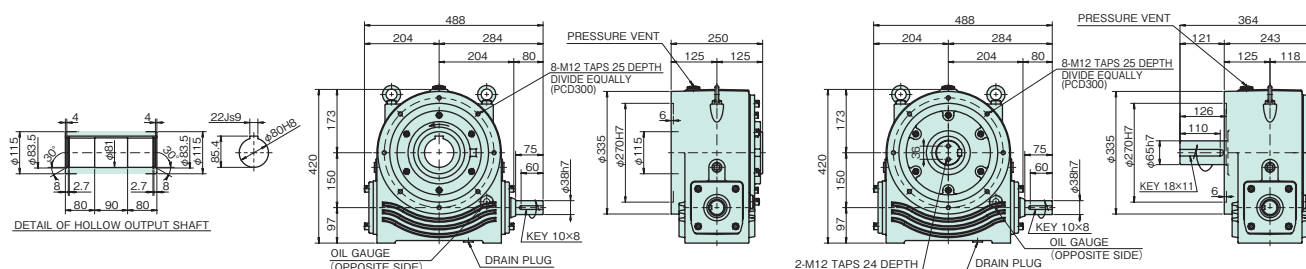


Estimated mass 113 kg

## SW150B

[B-LF]

[B-SLF]

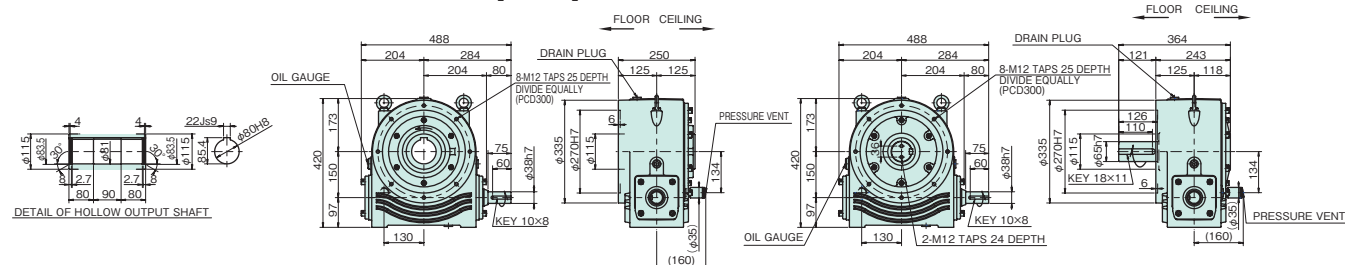


Estimated mass 113 kg

## SW150V

[V-LF]

[V-SLF]



Estimated mass 113 kg

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

| Size  | Input<br>Reduction<br>ratio | 1750 r/min  |                              | 1450 r/min  |                              | 1150 r/min  |                              | 950 r/min   |                              | 500 r/min   |                              | 100 r/min   |                              |
|-------|-----------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|
|       |                             | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} |
| SW150 | 10                          | 26.45       | 1364 {139}                   | 24.52       | 1519 {155}                   | 22.36       | 1734 {177}                   | 20.31       | 1894 {193}                   | 14.51       | 2508 {256}                   | 3.29        | 2646 {270}                   |
|       | 15                          | 19.58       | 1482 {151}                   | 18.19       | 1650 {168}                   | 16.62       | 1883 {192}                   | 15.21       | 2068 {211}                   | 10.41       | 2600 {265}                   | 2.33        | 2646 {270}                   |
|       | 20                          | 15.33       | 1519 {155}                   | 14.26       | 1691 {173}                   | 12.65       | 1869 {191}                   | 12.05       | 2134 {218}                   | 8.19        | 2646 {270}                   | 1.83        | 2646 {270}                   |
|       | 25                          | 12.45       | 1522 {155}                   | 11.59       | 1695 {173}                   | 10.48       | 1906 {195}                   | 9.85        | 2143 {219}                   | 6.69        | 2646 {270}                   | 1.50        | 2646 {270}                   |
|       | 30                          | 10.87       | 1539 {157}                   | 10.15       | 1713 {175}                   | 9.35        | 1956 {200}                   | 8.31        | 2074 {212}                   | 5.42        | 2421 {247}                   | 1.38        | 2646 {270}                   |
|       | 40                          | 8.36        | 1525 {156}                   | 7.83        | 1698 {173}                   | 7.03        | 1883 {192}                   | 6.74        | 2144 {219}                   | 4.69        | 2646 {270}                   | 1.12        | 2646 {270}                   |
|       | 50                          | 6.62        | 1474 {151}                   | 6.21        | 1642 {168}                   | 5.68        | 1849 {189}                   | 5.38        | 2077 {212}                   | 3.89        | 2646 {270}                   | 0.93        | 2646 {270}                   |
|       | 60                          | 5.43        | 1402 {143}                   | 5.11        | 1561 {159}                   | 4.69        | 1758 {179}                   | 4.45        | 1974 {201}                   | 3.31        | 2563 {262}                   | 0.82        | 2586 {264}                   |

When running a speed within the shaded boxes, and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.



 See previous page for reducers without motors

[illegible]

Technical drawing of the 2500 Series Compressor showing front and side views with dimensions and labels.

**Front View Dimensions:**

- Overall width:  $MW$
- Distance from motor to centerline:  $MW_1$
- Motor width:  $MA$
- Distance from motor to oil gauge:  $MC$
- Oil gauge diameter:  $\phi 16$
- Motor mounting flange diameter:  $MD$
- Motor mounting flange thickness: 16
- Motor mounting flange to centerline distance: 25
- Centerline to oil gauge distance: 300
- Oil gauge to centerline distance: 25
- Overall height: 350

**Side View Dimensions:**

- Overall width: 480
- Distance from motor to centerline: 150
- Motor width: 150
- Motor mounting flange diameter:  $\phi 65h7$
- Motor mounting flange thickness: 110
- Motor mounting flange to centerline distance: 126
- Motor mounting flange to oil gauge distance: 118
- Oil gauge diameter: 128
- Oil gauge to centerline distance: 246
- Overall height: 413
- Motor mounting flange to oil gauge distance: 167
- Motor mounting flange to centerline distance: 25
- Centerline to oil gauge distance: 225
- Oil gauge to centerline distance: 125
- Oil gauge to centerline distance: 45
- Overall height: 30
- Overall width: 420
- 4-24 HOLES

**Labels:**

- 2-M12 TAPS 24 DEPTH
- PRESSURE VENT
- OIL GAUGE
- DRAIN PLUG (OPPOSITE SIDE)
- KEY 18x11

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

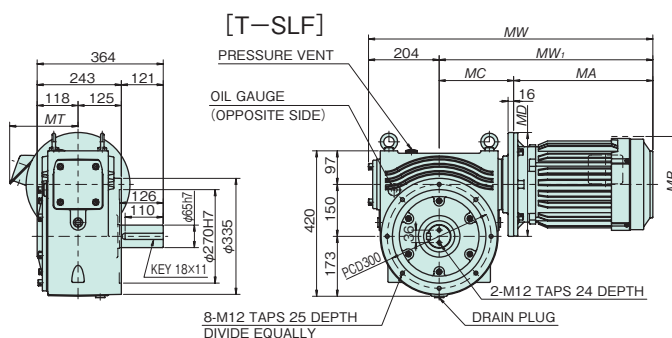
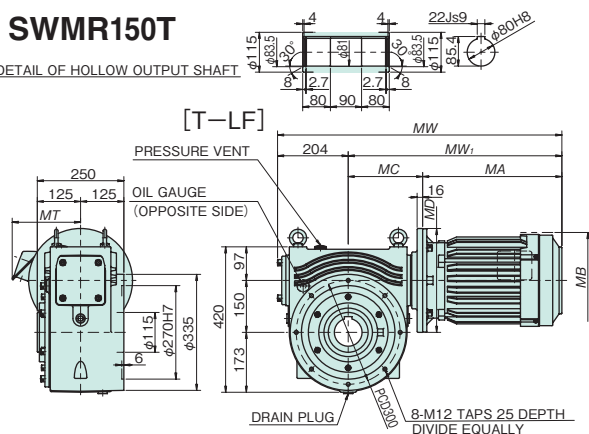
| Size    | Standard combination |                 | 1750 r/min                | 1450 r/min                | Values in ( ) for the motor indicates dimensions for a motor with a brake. |              |                 |              |              |              |                |                                |                                |
|---------|----------------------|-----------------|---------------------------|---------------------------|----------------------------------------------------------------------------|--------------|-----------------|--------------|--------------|--------------|----------------|--------------------------------|--------------------------------|
|         | Motor kW             | Reduction ratio | Output torque N·m {kgf·m} | Output torque N·m {kgf·m} | MA                                                                         | MC           | MW <sub>1</sub> | MW           | MB           | MD           | MT             | T type<br>Estimated mass<br>kg | V type<br>Estimated mass<br>kg |
| EWMR150 | 5.5                  | 40              | 1003 {102}                | 1193 {122}                | 402<br>(475)                                                               | 215<br>(215) | 617<br>(690)    | 792<br>(865) | 277<br>(275) | 300<br>(300) | 197<br>(200.0) | 195<br>(207)                   | 215<br>(227)                   |
|         |                      | 50              | 1225 {125}                | 1453 {148}                |                                                                            |              |                 |              |              |              |                |                                |                                |
|         |                      | 60              | 1402 {143}                | 1561 {159}                |                                                                            |              |                 |              |              |              |                |                                |                                |

\* Refer to page 17 for sizing.      \* Thermal rating factor is 1.0.

## Dimensional Drawings SWMR150T/SWMR150B/SWMR150V

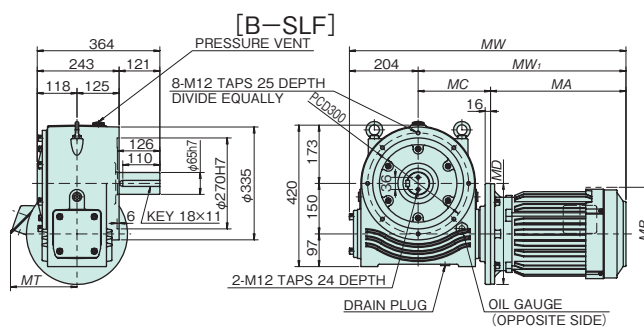
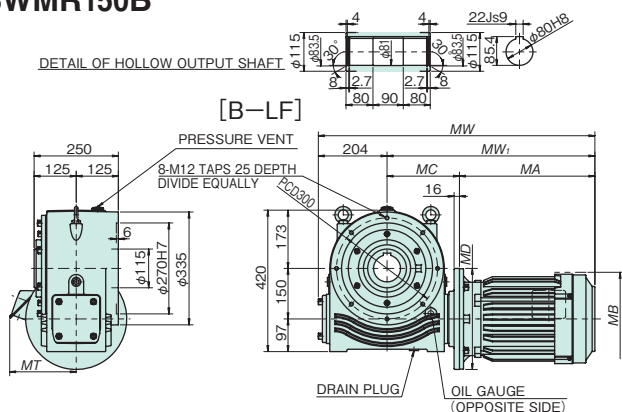
# SWMR150T

### DETAIL OF HOLLOW OUTPUT SHAFT

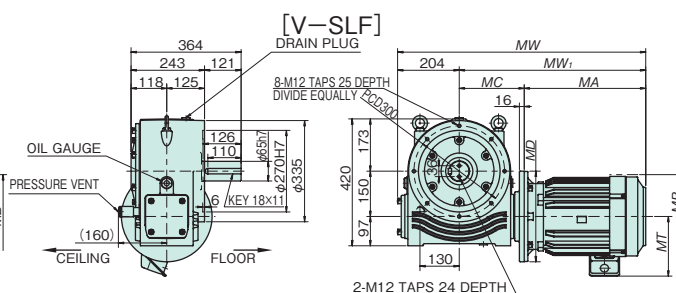
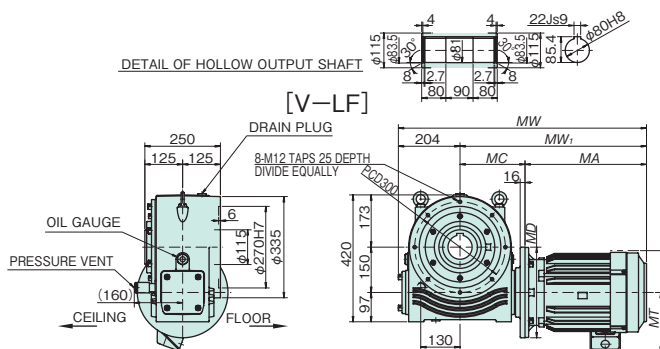


## SWMR150B

### DETAIL OF HOLLOW OUTPUT SHAFT

**SWMR150V**

### DETAIL OF HOLLOW OUTPUT SHAFT



## Transfer Capacity Table

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

| Size    | Standard combination |                 | 1750 r/min                | 1450 r/min                | Values in ( ) for the motor indicates dimensions for a motor with a brake. |              |                 |              |              |              |                |                   |
|---------|----------------------|-----------------|---------------------------|---------------------------|----------------------------------------------------------------------------|--------------|-----------------|--------------|--------------|--------------|----------------|-------------------|
|         | Motor kW             | Reduction ratio | Output torque N·m {kgf·m} | Output torque N·m {kgf·m} | MA                                                                         | MC           | MW <sub>1</sub> | MW           | MB           | MD           | MT             | Estimated mass kg |
| SWMR150 | 5.5                  | 40              | 1003 {102}                | 1193 {122}                | 402<br>(475)                                                               | 215<br>(215) | 617<br>(690)    | 821<br>(894) | 277<br>(275) | 300<br>(300) | 197<br>(200.0) | 175<br>(187)      |
|         |                      | 50              | 1225 {125}                | 1453 {148}                |                                                                            |              |                 |              |              |              |                |                   |
|         |                      | 60              | 1402 {143}                | 1561 {159}                |                                                                            |              |                 |              |              |              |                |                   |

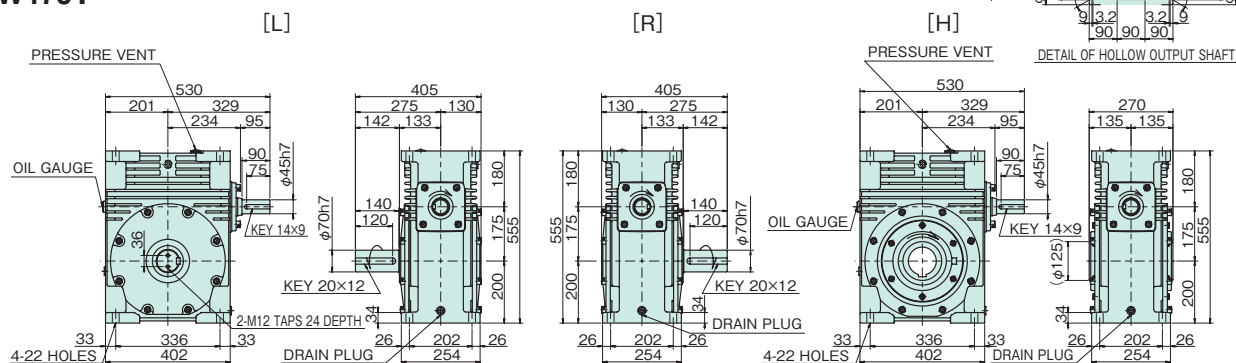
\* Motor/reducer combinations shown are standard.

\* Shaded boxes  indicate the motor capacity exceeds the input kW of the reducer. Confirm output torque before using.

\* Refer to page 17 for sizing.      \* Thermal rating factor is 1.0.

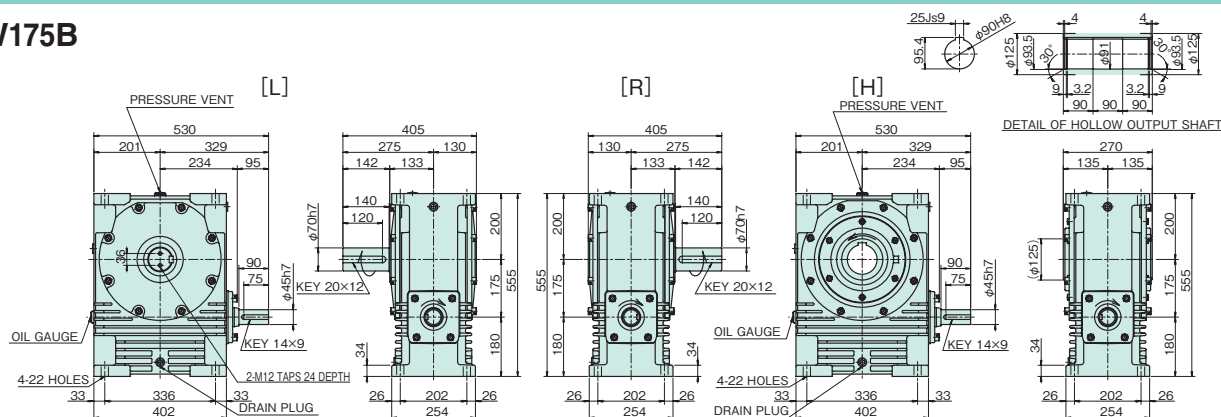
## Dimensional Drawings EW175T/EW175B/EW175V

### EW175T



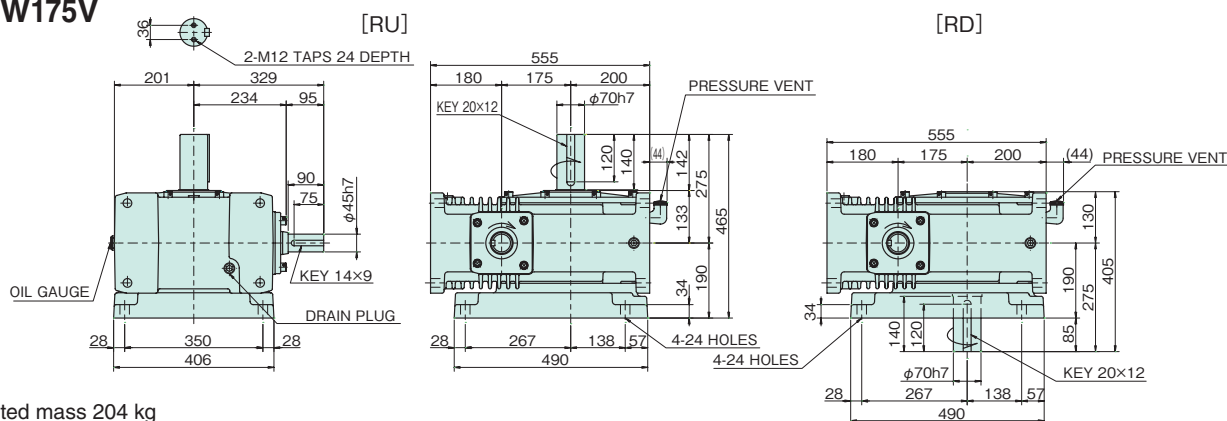
Estimated mass 184 kg

### EW175B



Estimated mass 177 kg

### EW175V



Estimated mass 204 kg

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

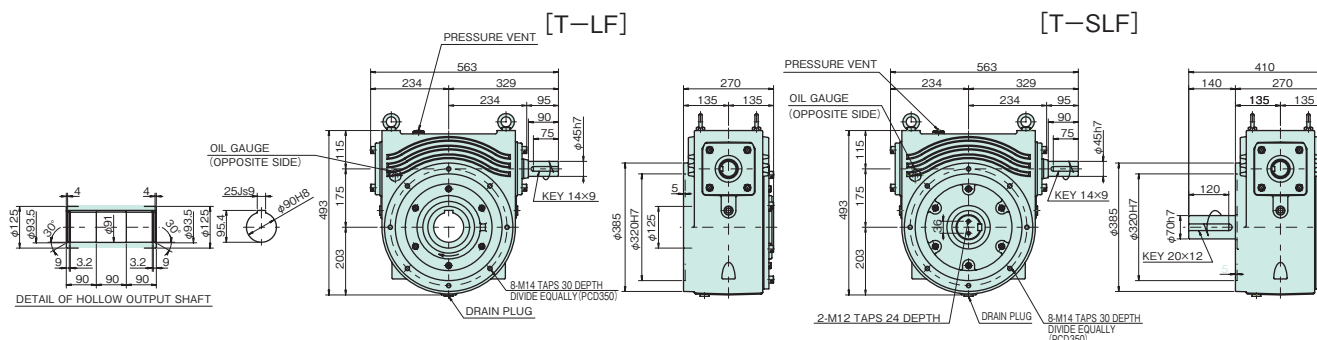
## Transfer Capacity Table

| Size  | Input<br>Reduction<br>ratio | 1750 r/min  |                              | 1450 r/min  |                              | 1150 r/min  |                              | 950 r/min   |                              | 500 r/min   |                              | 100 r/min   |                              |
|-------|-----------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|
|       |                             | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} |
| EW175 | 10                          | 37.09       | 1921 {196}                   | 34.37       | 2139 {218}                   | 30.78       | 2400 {245}                   | 27.07       | 2539 {259}                   | 17.86       | 3110 {317}                   | 4.19        | 3395 {347}                   |
|       | 15                          | 27.43       | 2088 {213}                   | 25.06       | 2288 {234}                   | 21.87       | 2496 {255}                   | 19.27       | 2641 {270}                   | 12.78       | 3223 {329}                   | 2.96        | 3396 {347}                   |
|       | 20                          | 21.44       | 2140 {218}                   | 19.82       | 2370 {242}                   | 17.27       | 2575 {263}                   | 15.24       | 2725 {278}                   | 10.15       | 3318 {339}                   | 2.31        | 3396 {347}                   |
|       | 25                          | 16.85       | 2068 {211}                   | 15.68       | 2302 {235}                   | 14.36       | 2625 {268}                   | 12.70       | 2777 {283}                   | 8.50        | 3378 {345}                   | 1.93        | 3395 {347}                   |
|       | 30                          | 15.16       | 2170 {221}                   | 13.46       | 2300 {235}                   | 11.63       | 2467 {252}                   | 10.23       | 2589 {264}                   | 6.66        | 3031 {309}                   | 1.74        | 3396 {347}                   |
|       | 40                          | 11.62       | 2149 {219}                   | 10.87       | 2393 {244}                   | 9.70        | 2640 {269}                   | 8.62        | 2794 {285}                   | 5.89        | 3390 {346}                   | 1.40        | 3396 {347}                   |
|       | 50                          | 8.93        | 2001 {204}                   | 8.37        | 2228 {227}                   | 7.75        | 2544 {260}                   | 7.18        | 2795 {285}                   | 4.95        | 3396 {347}                   | 1.20        | 3396 {347}                   |
|       | 60                          | 7.52        | 1973 {201}                   | 7.06        | 2197 {224}                   | 6.35        | 2428 {248}                   | 6.12        | 2773 {283}                   | 4.28        | 3396 {347}                   | 1.05        | 3396 {347}                   |

When running a speed within the shaded boxes, and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.

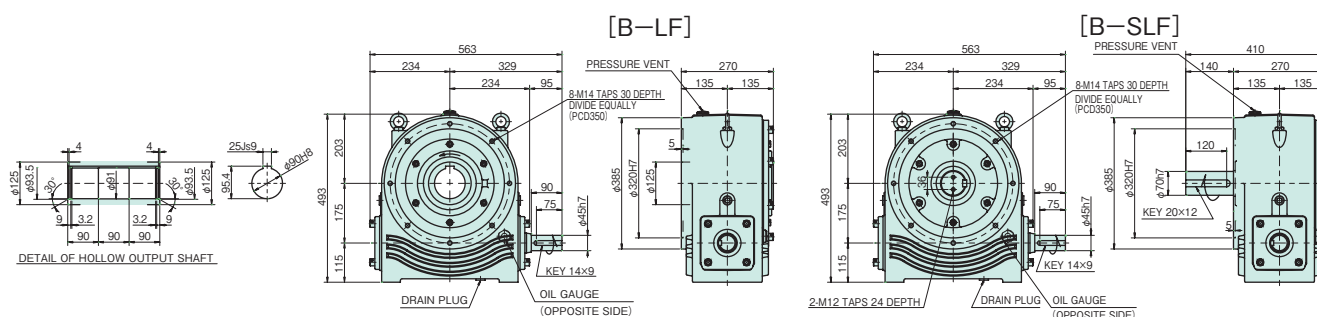
## Dimensional Drawings SW175T/SW175B/SW175V

## SW175T



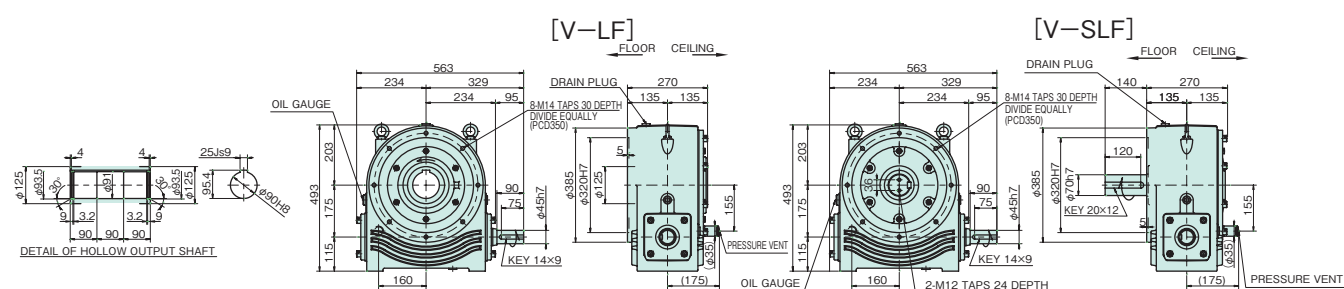
Estimated mass 168 kg

## SW175B



Estimated mass 168 kg

## SW175V



Estimated mass 168 kg

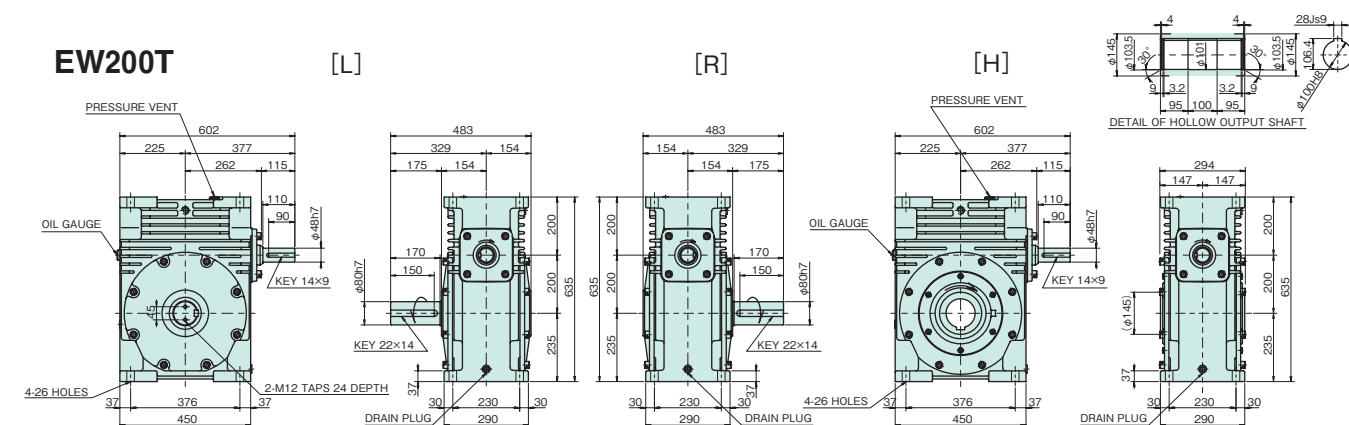
\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

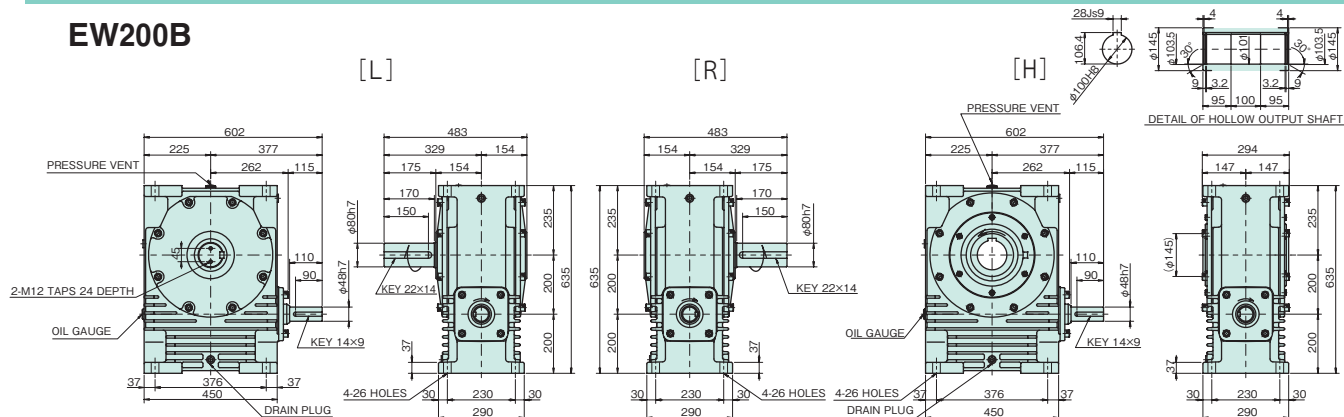
| Size  | Input           | 1750 r/min |                           | 1450 r/min |                           | 1150 r/min |                           | 950 r/min |                           | 500 r/min |                           | 100 r/min |                           |
|-------|-----------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
|       | Reduction ratio | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} |
| SW175 | 10              | 37.09      | 1921 {196}                | 34.37      | 2139 {218}                | 30.78      | 2400 {245}                | 27.07     | 2539 {259}                | 17.86     | 3110 {317}                | 4.19      | 3395 {347}                |
|       | 15              | 27.43      | 2088 {213}                | 25.06      | 2288 {234}                | 21.87      | 2496 {255}                | 19.27     | 2641 {270}                | 12.78     | 3223 {329}                | 2.96      | 3396 {347}                |
|       | 20              | 21.44      | 2140 {218}                | 19.82      | 2370 {242}                | 17.27      | 2575 {263}                | 15.24     | 2725 {278}                | 10.15     | 3318 {339}                | 2.31      | 3396 {347}                |
|       | 25              | 16.85      | 2068 {211}                | 15.68      | 2302 {235}                | 14.36      | 2625 {268}                | 12.70     | 2777 {283}                | 8.50      | 3378 {345}                | 1.93      | 3395 {347}                |
|       | 30              | 15.16      | 2170 {221}                | 13.46      | 2300 {235}                | 11.63      | 2467 {252}                | 10.23     | 2589 {264}                | 6.66      | 3031 {309}                | 1.74      | 3396 {347}                |
|       | 40              | 11.62      | 2149 {219}                | 10.87      | 2393 {244}                | 9.70       | 2640 {269}                | 8.62      | 2794 {285}                | 5.89      | 3390 {346}                | 1.40      | 3396 {347}                |
|       | 50              | 8.93       | 2001 {204}                | 8.37       | 2228 {227}                | 7.75       | 2544 {260}                | 7.18      | 2795 {285}                | 4.95      | 3396 {347}                | 1.20      | 3396 {347}                |
|       | 60              | 7.52       | 1973 {201}                | 7.06       | 2197 {224}                | 6.35       | 2428 {248}                | 6.12      | 2773 {283}                | 4.28      | 3396 {347}                | 1.05      | 3396 {347}                |

When running a speed within the shaded boxes , and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.

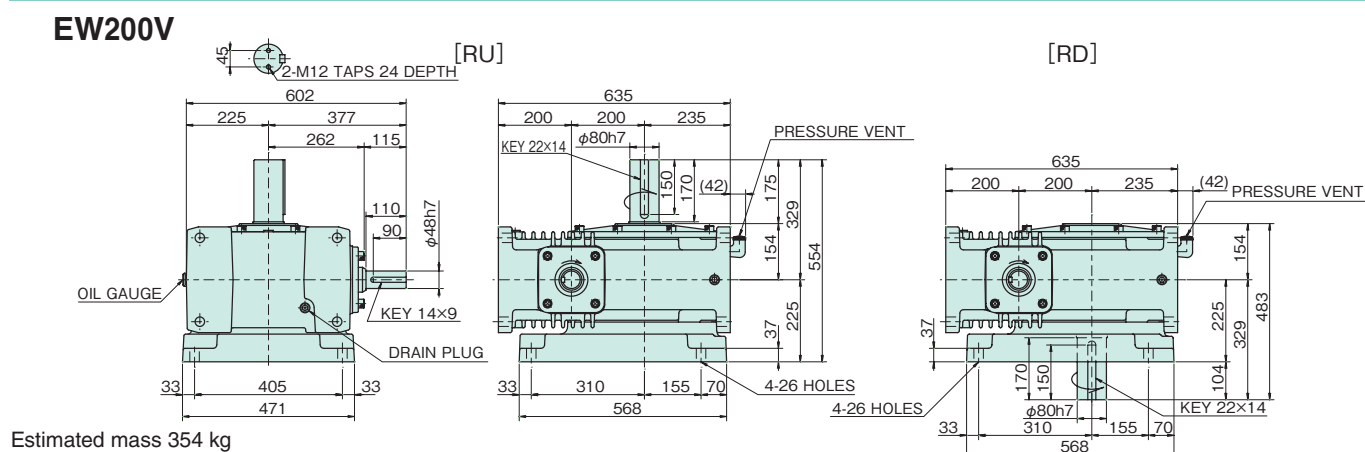
## Dimensional Drawings EW200T/EW200B/EW200V



Estimated mass 314 kg



Estimated mass 304 kg



Estimated mass 354 kg

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

### Transfer Capacity Table

| Size  | Input<br>Reduction<br>ratio | 1750 r/min  |                              | 1450 r/min  |                              | 1150 r/min  |                              | 950 r/min   |                              | 500 r/min   |                              | 100 r/min   |                              |
|-------|-----------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|-------------|------------------------------|
|       |                             | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} | Input<br>kW | Output torque<br>N·m {kgf·m} |
| EW200 | 10                          | 50.13       | 2597 {265}                   | 46.43       | 2892 {295}                   | 42.28       | 3301 {337}                   | 39.17       | 3682 {376}                   | 26.44       | 4613 {471}                   | 7.05        | 5704 {582}                   |
|       | 15                          | 36.95       | 2813 {287}                   | 34.28       | 3132 {320}                   | 31.29       | 3576 {365}                   | 28.46       | 3907 {399}                   | 18.91       | 4776 {487}                   | 4.99        | 5703 {582}                   |
|       | 20                          | 28.93       | 2888 {295}                   | 26.88       | 3216 {328}                   | 24.59       | 3671 {375}                   | 22.49       | 4025 {411}                   | 15.01       | 4910 {501}                   | 3.92        | 5704 {582}                   |
|       | 25                          | 22.86       | 2804 {286}                   | 21.27       | 3122 {319}                   | 19.49       | 3564 {364}                   | 18.16       | 3975 {406}                   | 12.56       | 4992 {509}                   | 3.27        | 5704 {582}                   |
|       | 30                          | 20.38       | 2916 {298}                   | 19.00       | 3247 {331}                   | 17.29       | 3671 {375}                   | 15.21       | 3855 {393}                   | 9.94        | 4526 {462}                   | 2.95        | 5704 {582}                   |
|       | 40                          | 15.67       | 2894 {295}                   | 14.65       | 3223 {329}                   | 13.51       | 3680 {376}                   | 12.66       | 4105 {419}                   | 8.71        | 5018 {512}                   | 2.39        | 5703 {582}                   |
|       | 50                          | 12.11       | 2709 {276}                   | 11.35       | 3017 {308}                   | 10.50       | 3444 {352}                   | 9.87        | 3842 {392}                   | 7.41        | 5073 {518}                   | 2.06        | 5703 {582}                   |
|       | 60                          | 10.15       | 2646 {270}                   | 9.53        | 2947 {301}                   | 8.85        | 3365 {343}                   | 8.34        | 3754 {383}                   | 6.55        | 5137 {524}                   | 1.83        | 5703 {582}                   |

When running a speed within the shaded boxes, and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.

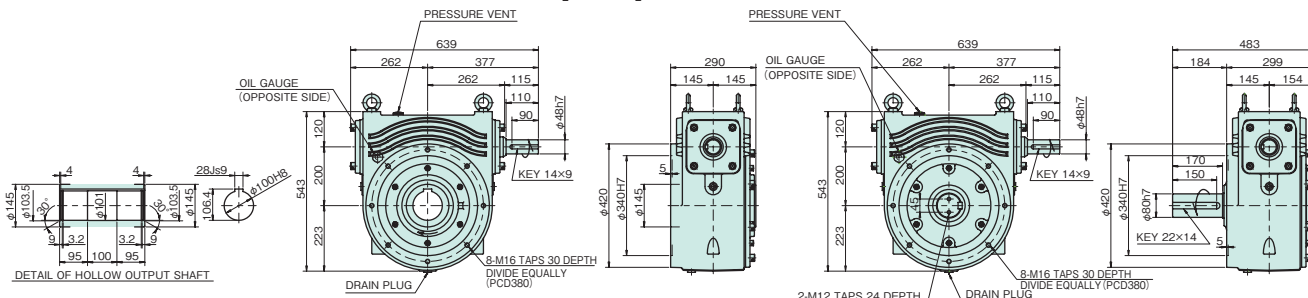


## Dimensional Drawings SW200T/SW200B/SW200V

# SW200T

[T-LF]

[T-SLF]

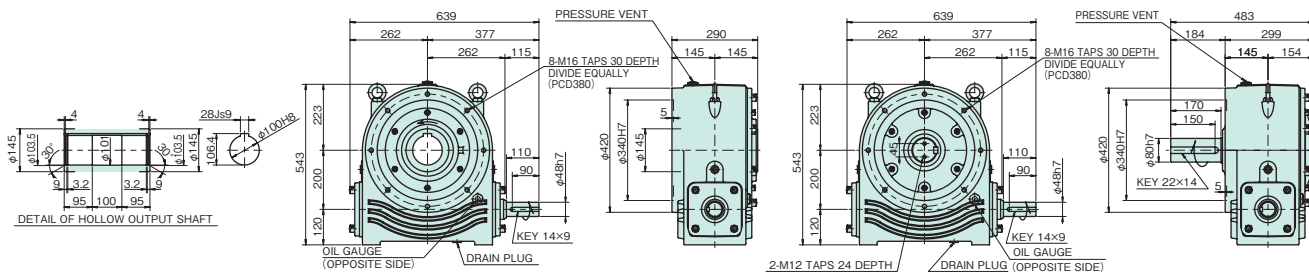


Estimated mass 234 kg

# SW200B

[B-LF]

[B-SLF]

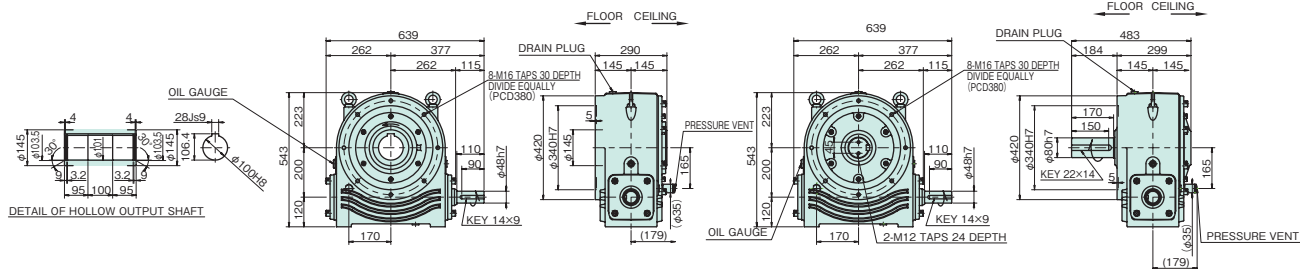


Estimated mass 234 kg

## SW200V

[V-LF]

[V-SLF]



Estimated mass 234 kg

\* Refer to page 24 for shaft arrangements and relative direction of rotation.

## Transfer Capacity Table

| Size  | Input           | 1750 r/min |                           | 1450 r/min |                           | 1150 r/min |                           | 950 r/min |                           | 500 r/min |                           | 100 r/min |                           |
|-------|-----------------|------------|---------------------------|------------|---------------------------|------------|---------------------------|-----------|---------------------------|-----------|---------------------------|-----------|---------------------------|
|       | Reduction ratio | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW   | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} | Input kW  | Output torque N·m {kgf·m} |
| SW200 | 10              | 50.13      | 2597 {265}                | 46.43      | 2892 {295}                | 42.28      | 3301 {337}                | 39.17     | 3682 {376}                | 26.44     | 4613 {471}                | 7.05      | 5704 {582}                |
|       | 15              | 36.95      | 2813 {287}                | 34.28      | 3132 {320}                | 31.29      | 3576 {365}                | 28.46     | 3907 {399}                | 18.91     | 4776 {487}                | 4.99      | 5703 {582}                |
|       | 20              | 28.93      | 2888 {295}                | 26.88      | 3216 {328}                | 24.59      | 3671 {375}                | 22.49     | 4025 {411}                | 15.01     | 4910 {501}                | 3.92      | 5704 {582}                |
|       | 25              | 22.86      | 2804 {286}                | 21.27      | 3122 {319}                | 19.49      | 3564 {364}                | 18.16     | 3975 {406}                | 12.56     | 4992 {509}                | 3.27      | 5704 {582}                |
|       | 30              | 20.38      | 2916 {298}                | 19.00      | 3247 {331}                | 17.29      | 3671 {375}                | 15.21     | 3855 {393}                | 9.94      | 4526 {462}                | 2.95      | 5704 {582}                |
|       | 40              | 15.67      | 2894 {295}                | 14.65      | 3223 {329}                | 13.51      | 3680 {376}                | 12.66     | 4105 {419}                | 8.71      | 5018 {512}                | 2.39      | 5703 {582}                |
|       | 50              | 12.11      | 2709 {276}                | 11.35      | 3017 {308}                | 10.50      | 3444 {352}                | 9.87      | 3842 {392}                | 7.41      | 5073 {518}                | 2.06      | 5703 {582}                |
|       | 60              | 10.15      | 2646 {270}                | 9.53       | 2947 {301}                | 8.85       | 3365 {343}                | 8.34      | 3754 {383}                | 6.55      | 5137 {524}                | 1.83      | 5703 {582}                |

When running a speed within the shaded boxes , and also continuously for more than two hours, refer to the thermal rating factor on page 17 to factor this into your selection.



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