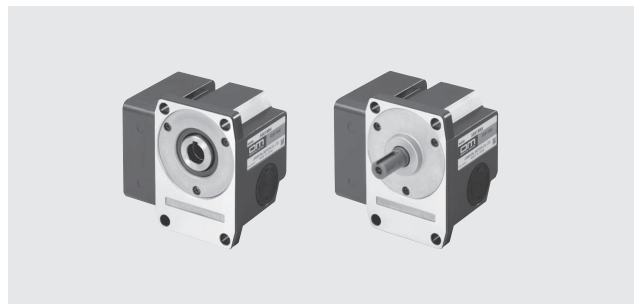


Right-Angle Gearheads

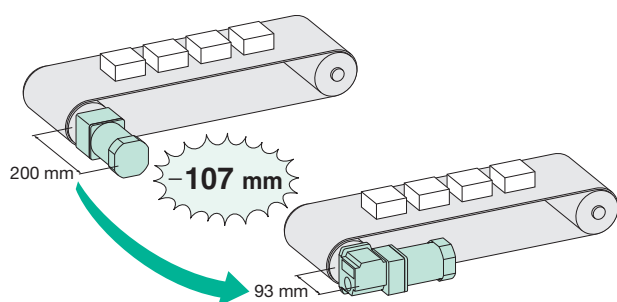
Right-angle gearheads are flange-mounted gearheads that use worm gears and special helical gears. They allow motors to be installed at right angles to the axis of equipment such as belt conveyors. They are available in hollow shaft **RH** and solid shaft **RA** types and are ideal for keeping equipment compact.



Features

● Ideal for Space-Saving Solution

The output shaft is perpendicular to the motor shaft, so the motor can be installed perpendicularly to the axis being driven, enabling space-saving.



5IK90GE-CW2E motor and gearhead with a gear ratio of 1:18

Hollow shaft gearheads allow additional space savings and simpler mechanism designs due to the removal of some parts of mechanism as they do not require couplings for mounting.

Applicable Products

The right-angle gearheads can be used with pinion shaft type motors listed below.

Applicable Products	Series	Output Power	Pages
Induction Motors	World K Series	25 W, 40 W, 60 W, 90 W	A-34, A-38, A-42, A-46
Reversible Motors	World K Series	25 W, 40 W, 60 W, 90 W	A-76, A-80, A-84, A-88
Electromagnetic Brake Motors	World K Series	25 W, 40 W, 60 W, 90 W	A-110, A-114, A-118, A-122
Speed Control Motors	US Series	25 W, 40 W, 60 W, 90 W	A-164
	ES02 + World K Series Speed Control Motors	25 W, 40 W, 60 W	A-178
Inverter	FE100 + World K Series Induction Motors	25 W, 40 W, 60 W, 90 W	A-196

● The right-angle gearheads cannot be used with torque motors.

● Wide Variation

A wide variety of gear ratios (20 types, from **3** to **180**) are available. The optimum gear ratio can be selected as the same with ordinary gearheads. The maximum permissible torques are also the same as for ordinary gearheads.

● Solid shaft of **GE** pinion gearheads come with a tapped hole at the tip of the shaft.

● RoHS RoHS-Compliant

Right-Angle Gearheads conform to the RoHS Directive that prohibits the use of six chemical substances including lead and cadmium.

● Details of RoHS Directive → Page G-23

Product Number Code

5 GE 25 RH

① ② ③ ④

①	Gearhead Frame Size	4: 80 mm 5: 90 mm
②	Type of Pinion	GN: GN Type Pinion GE: GE Type Pinion GU: GU Type Pinion
③	Gear Ratio	(Example) 25: Gear Ratio of 1:25
④		RH: Right-Angle, Hollow Shaft Gearhead, RoHS-Compliant RA: Right-Angle, Solid Shaft Gearhead, RoHS-Compliant

Product Line

Hollow Shaft Type (RoHS)

Gearhead Model	Gear Ratio
4GN □RH	3~180
5GN □RH	3~180
5GE □RH	3~180
5GU □RH	3~180

● Enter the gear ratio in the box (□) within the model name.

The following items are included in each product.

Gearhead, Mounting Screws, Parallel Key, Safety Cover (with screws), Gasket, Operating Manual

Solid Shaft Type (RoHS)

Gearhead Model	Gear Ratio
4GN □RA	3~180
5GN □RA	3~180
5GE □RA	3~180
5GU □RA	3~180

● Enter the gear ratio in the box (□) within the model name.

The following items are included in each product.

Gearhead, Mounting Screws, Parallel Key, Gasket, Operating Manual

Specifications

Gearhead Model	Gear Ratio	Max. Permissible Torque N·m	Permissible Overhung Load N		Permissible Thrust Load N
			10 mm from Shaft End	20 mm from Shaft End	
4GN □RH	3~180	8.0	250*	220*	100
5GN □RH	3~180	10	350*	310*	200
5GE □RH	3~180	20	560*	500*	250
5GU □RH	3~180	20	560*	500*	250
4GN □RA	3~18	8.0	100	150	100
	25~180		200	300	
5GN □RA	3~18	10	250	350	200
	25~180		300	450	
5GE □RA	3~9	20	400	500	250
	12.5~25		450	600	
	30~180		500	700	
5GU □RA	3~9	20	400	500	250
	12.5~25		450	600	
	30~180		500	700	

* With the hollow shaft type, the permissible overhung load is measured from the flange-mounting surface.

● Enter the gear ratio in the box (□) within the model name.

Note:

● The right-angle gearhead does not have self-locking capabilities.

Introduction

Induction
MotorsReversible
MotorsElectro-
magnetic Brake
MotorsRight-Angle
GearheadsBrake Pack
SB50WAC Speed Control Motors
US
ES02FE100/FE200
InverterWatertight,
Dust-Resistant
Motors

Torque Motors

Accessories

Installation

■ Gearmotor – Torque Table

The permissible torque shown on pages A-135 to A-142 cover most motor combinations. For motor combinations not covered, use the efficiency value in the table below for your calculations. When making a selection, remember that the transfer efficiency at starting is lower than at the rated speed.

$$\text{Permissible torque } \dots\dots T_G = T_M \times i \times \eta$$

T_G : Permissible torque of gearhead
 T_M : Motor torque
 i : Gearhead gear ratio
 η : Gearhead efficiency

● Gearhead Efficiency

Gearhead Model		Gear Ratio																	
		3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120
4GN□RH	Rated	40%			50%			60%											
	Starting	40%			50%			54%											
5GN□RH	Rated	50%			68%			60%											
	Starting	50%			60%			54%											
5GE□RH	Rated	50%			68%			60%						50%					
	Starting	50%			60%			54%						45%					
5GU□RH	Rated	50%			68%			60%						50%					
	Starting	50%			60%			54%						45%					
4GN□RA	Rated	50%			68%			60%											
	Starting	50%			60%			54%											
5GN□RA	Rated	68%			60%			60%											
	Starting	60%			54%			54%											
5GE□RA	Rated	68%			60%			60%						50%					
	Starting	60%			54%			54%						45%					
5GU□RA	Rated	68%			60%			60%						50%					
	Starting	60%			54%			54%						45%					

● Enter the gear ratio in the box (□) within the model name.

Note:

● If used with an inverter, not all gear ratios are available. Check the list of permissible torque on pages A-142.

■ Calculating Permissible Overhung Load of Hollow Shaft Types

When the end of the shaft being driven is not supported by a bearing in the figure shown below, calculate the permissible overhung load using the following formula.

(This mechanism is the most demanding in terms of overhung load.)

● 4GN□RH

Permissible overhung load $W [N] = \frac{59.5}{59.5 + L_p} \times 295 [N]^*$
 *295 [N]: Permissible overhung load at the flange mounting surface

● 5GN□RH

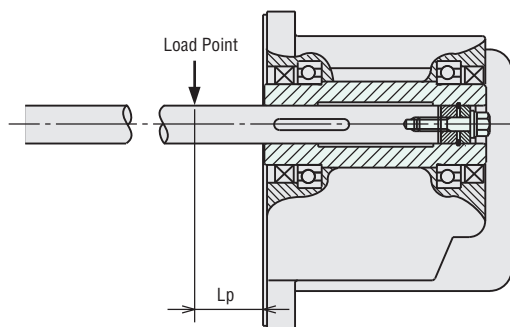
Permissible overhung load $W [N] = \frac{70}{70 + L_p} \times 400 [N]^*$
 *400 [N]: Permissible overhung load at the flange mounting surface

● 5GE□RH

Permissible overhung load $W [N] = \frac{68.5}{68.5 + L_p} \times 645 [N]^*$
 *645 [N]: Permissible overhung load at the flange mounting surface

● 5GU□RH

Permissible overhung load $W [N] = \frac{68.5}{68.5 + L_p} \times 645 [N]^*$
 *645 [N]: Permissible overhung load at the flange mounting surface



L_p [mm]: Distance from flange mounting surface to overhung load point

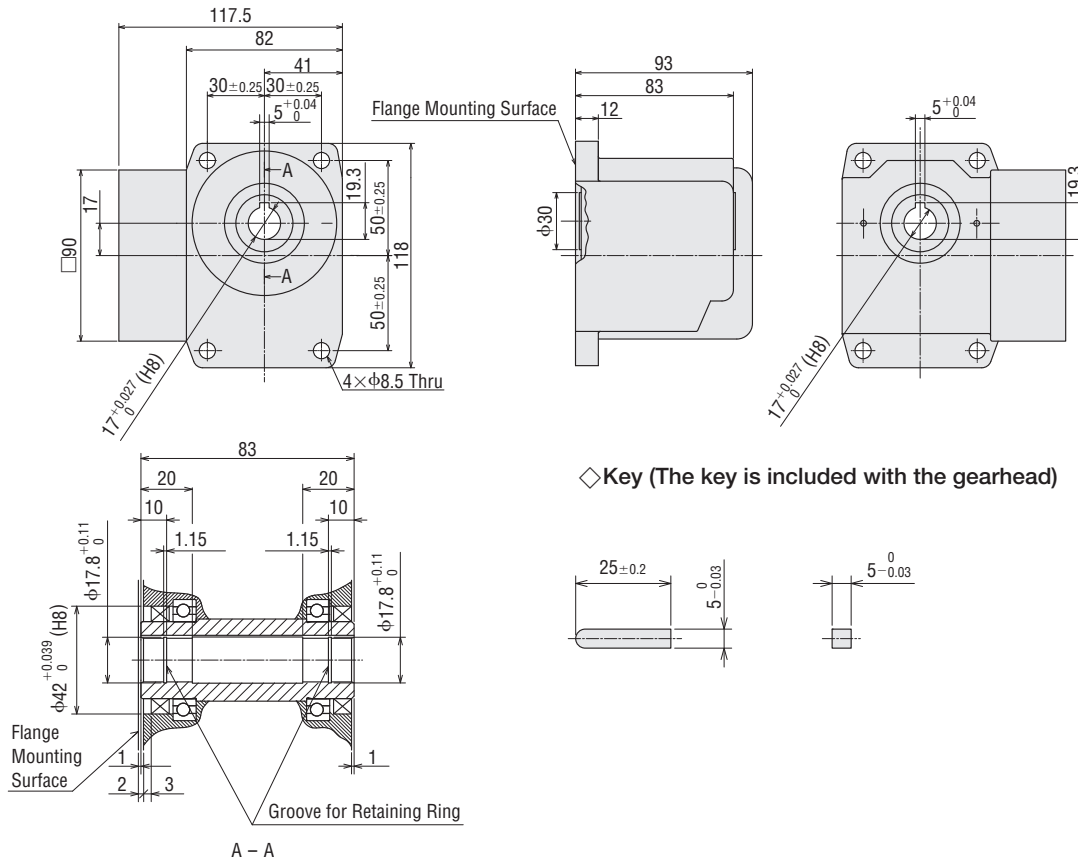
■ Permissible Load Inertia of Gearhead: J

→ Page A-16

◇ Hollow Shaft Type

5GE□RH

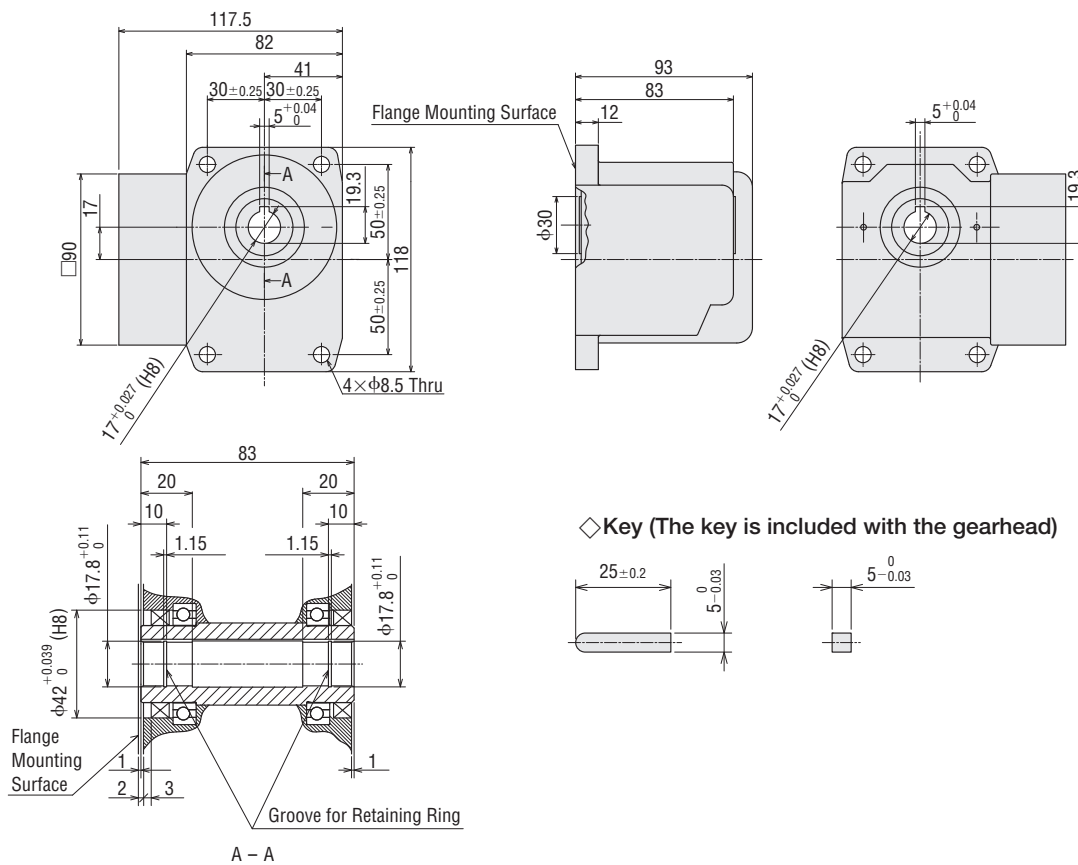
Mass: 2.5 kg



◇ Hollow Shaft Type

5GU□RH

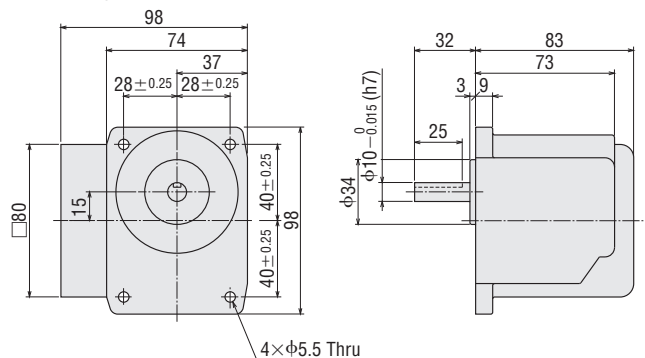
Mass: 2.5 kg



◇ Solid Shaft Type

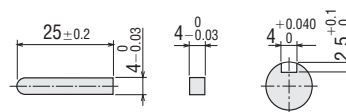
4GN□RA

Mass: 1.6 kg



◇ Key and Key Slot

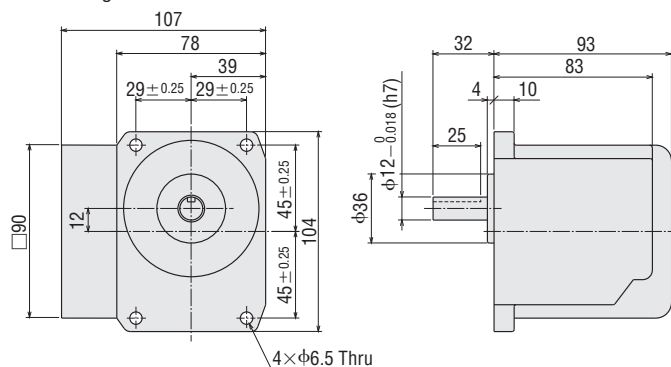
(The key is included with the gearhead)



◇ Solid Shaft Type

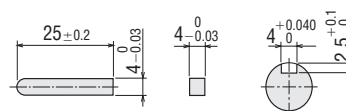
5GN□RA

Mass: 2.0 kg



◇ Key and Key Slot

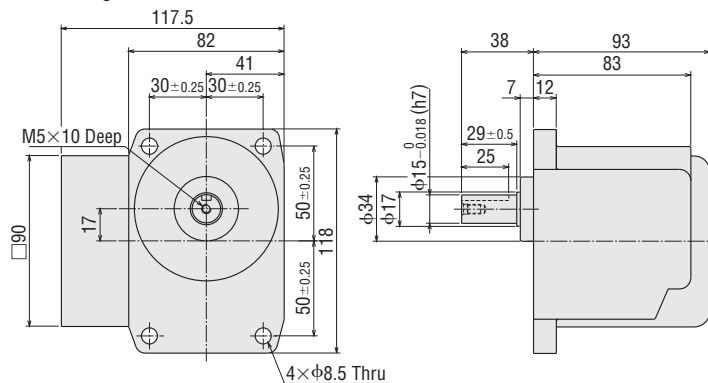
(The key is included with the gearhead)



◇ Solid Shaft Type

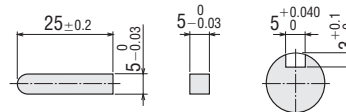
5GE□RA

Mass: 2.5 kg



◇ Key and Key Slot

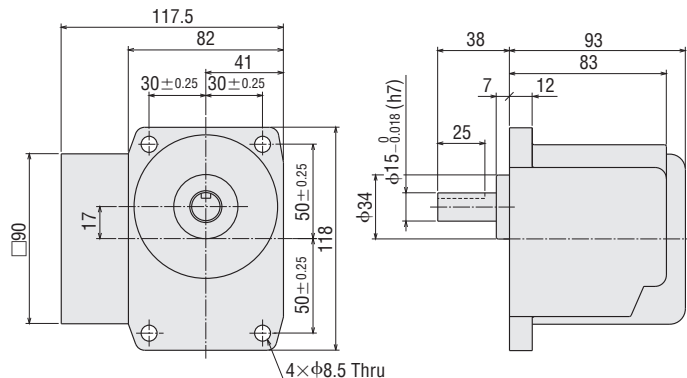
(The key is included with the gearhead)



◇ Solid Shaft Type

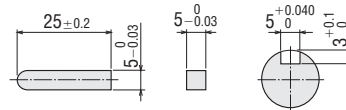
5GU□RA

Mass: 2.5 kg



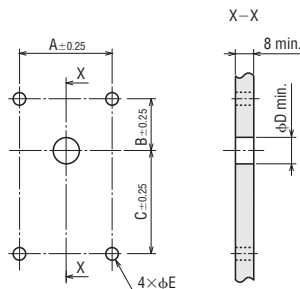
◇ Key and Key Slot

(The key is included with the gearhead)



◇ Dimensions of the Gearhead Mounting Surface

Allow at least 8 mm for the thickness of the mounting plate and use screws of the appropriate length.



Unit = mm

Type	Model	A	B	C	φD	φE
Hollow Shaft	4GN □RH	56	25	55	φ15	φ5.5
	5GN □RH	58	33	57	φ15	φ6.5
	5GE □RH	60	33	67	φ17	φ8.5
	5GU □RH	60	33	67	φ17	φ8.5
Solid Shaft	4GN □RA	56	25	55	φ35	φ5.5
	5GN □RA	58	33	57	φ37	φ6.5
	5GE □RA	60	33	67	φ35	φ8.5
	5GU □RA	60	33	67	φ35	φ8.5

● Enter the gear ratio in the box (□) within the model name.

■ Mounting Method for Hollow Shaft Type Gearhead

● Example of Mounting the Load

These figures below show how to mount loads depending on the shape of the shaft.

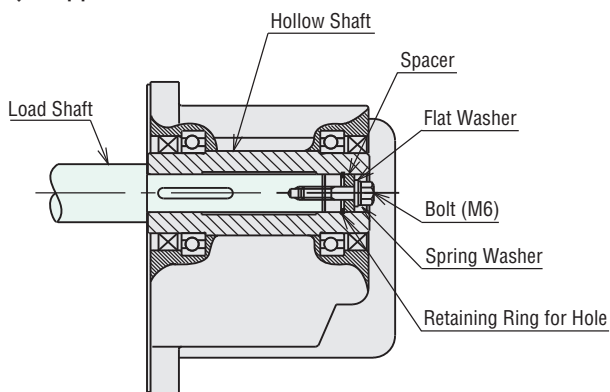
The tolerance of the inner diameter for the hollow shaft is finished as H8, and "key slot" processing is given to mount the load shaft. The recommended tolerance of the load shaft is h7. Use the key provided with the product by fastening it to the shaft. Apply a coating of molybdenum disulfide or similar grease to the inner diameter of the load shaft to prevent binding. Recommended load shaft diameter is shown on the right.

Unit = mm

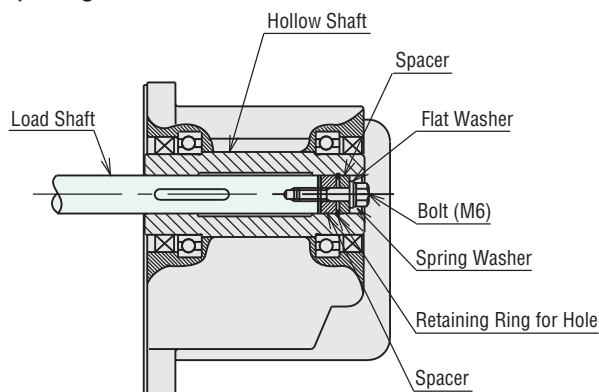
Model	Inner Diameter of Hollow Shaft H8	Recommended Load Shaft Diameter h7
4GN □RH	φ15 ^{+0.027} / ₀	φ15 _{-0.018} ⁰
5GN □RH	φ15 ^{+0.027} / ₀	φ15 _{-0.018} ⁰
5GE □RH	φ17 ^{+0.027} / ₀	φ17 _{-0.018} ⁰
5GU □RH	φ17 ^{+0.027} / ₀	φ17 _{-0.018} ⁰

● Enter the gear ratio in the box (□) within the model name.

◇ Stepped Load Shaft



◇ Straight Load Shaft



Notes:

- If the bolt extends out more than 4 mm from the end of the hollow shaft, a safety cover can not be installed. (Hollow shaft type gearheads include a safety cover.)
- Bolts or other fasteners used to install the load shaft are not included. These parts must be purchased separately.

Gearmotor – Torque Table

- Enter the code that represents the terminal box type "T" in the box (□) within the model name.
- Enter the gear ratio in the box (□) within the model name.
- The speed is calculated by dividing the motor's synchronous speed by the gear ratio.
The actual speed is 2-20% less than the displayed value, depending on the load.
- The transfer efficiency at starting is lower than at the rated speed, so output torque is lower.

World K Series Induction Motors

◇ Hollow Shaft Type 50 Hz

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model	Speed r/min	500	416	300	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3
		Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150
4IK25GN-CW2□E /4GN□RH	Rated	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
	Starting (220 VAC)	0.13	0.16	0.22	0.26	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
	Starting (230 VAC)	0.14	0.17	0.24	0.29	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8
4IK25GN-SW2□ /4GN□RH	Rated	0.23	0.27	0.38	0.46	0.71	0.86	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.8	8	8	8	8	8	8
	Starting	0.29	0.35	0.48	0.58	0.90	1.1	1.6	1.9	2.3	3.2	3.9	4.7	6.5	7.8	8	8	8	8	8	8
5IK40GN-CW2□E /5GN□RH	Rated (220 VAC)	0.47	0.57	0.79	0.95	1.6	1.9	2.7	3.2	3.9	4.7	5.7	6.8	9.5	10	10	10	10	10	10	10
	Rated (230 VAC)	0.45	0.54	0.75	0.90	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
	Starting	0.30	0.36	0.50	0.60	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
5IK40GN-SW2□ /5GN□RH	Rated	0.45	0.54	0.75	0.90	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
	Starting	0.60	0.72	1.0	1.2	1.8	2.2	3.0	3.6	4.3	5.4	6.5	7.8	10	10	10	10	10	10	10	10
5IK60GE-CW2□E /5GE□RH	Rated	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
	Starting	0.48	0.58	0.80	0.96	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20
5IK60GE-SW2□ /5GE□RH	Rated	0.68	0.81	1.1	1.4	2.3	2.8	3.8	4.6	5.5	7.7	8.1	9.7	13.5	16.2	20	20	20	20	20	20
	Starting	0.90	1.1	1.5	1.8	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20
5IK90GE-CW2□E /5GE□RH	Rated	1.1	1.3	1.8	2.2	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
	Starting	0.68	0.81	1.1	1.4	2.0	2.4	3.4	4.1	4.9	6.8	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
5IK90GE-SW2□ /5GE□RH	Rated	1.0	1.2	1.7	2.0	3.5	4.2	5.8	6.9	8.3	11.6	12.2	14.7	20	20	20	20	20	20	20	20
	Starting	1.3	1.5	2.1	2.6	3.8	4.6	6.4	7.7	9.2	12.8	13.8	16.5	20	20	20	20	20	20	20	20

◇ Hollow Shaft Type 60 Hz

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
		Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150
4IK25GN-CW2□E /4GN□RH	Rated	0.20	0.24	0.34	0.41	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
	Starting (220 VAC)	0.13	0.16	0.22	0.26	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
	Starting (230 VAC)	0.14	0.17	0.24	0.29	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8
4IK25GN-SW2□ /4GN□RH	Rated	0.19	0.23	0.32	0.38	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8
	Starting	0.19	0.23	0.32	0.38	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
5IK40GN-CW2□E /5GN□RH	Rated	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
	Starting	0.30	0.36	0.50	0.60	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
5IK40GN-SW2□ /5GN□RH	Rated	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
	Starting	0.39	0.47	0.65	0.78	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5IK60GE-CW2□E /5GE□RH	Rated	0.61	0.73	1.0	1.2	2.1	2.5	3.4	4.1	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
	Starting	0.48	0.58	0.80	0.96	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20
5IK60GE-SW2□ /5GE□RH	Rated	0.57	0.68	0.95	1.1	1.9	2.3	3.2	3.9	4.7	6.5	6.8	8.2	11.4	13.7	17.1	20	20	20	20	20
	Starting	0.75	0.90	1.3	1.5	2.3	2.7	3.8	4.5	5.4	7.5	8.1	9.7	13.5	16.2	20	20	20	20	20	20
5IK90GE-CW2□E /5GE□RH	Rated	0.91	1.1	1.5	1.8	3.1	3.7	5.1	6.2	7.4	10.3	10.9	13.1	18.2	20	20	20	20	20	20	20
	Starting	0.68	0.81	1.1	1.4	2.0	2.4	3.4	4.1	4.9	6.8	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
5IK90GE-SW2□ /5GE□RH	Rated	0.86	1.0	1.4	1.7	2.9	3.5	4.8	5.8	7.0	9.7	10.3	12.3	17.1	20	20	20	20	20	20	20
	Starting	1.1	1.3	1.8	2.1	3.2	3.8	5.3	6.3	7.6	10.5	11.3	13.6	18.9	20	20	20	20	20	20	20

◇ Solid Shaft Type 50 Hz

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model Motor/ Gearhead	Speed r/min	500	416	300	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3
	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4IK25GN-CW2 <input type="checkbox"/> E /4GN <input type="checkbox"/> RA	Rated	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
	Starting (220 VAC)	0.17	0.20	0.28	0.33	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
	Starting (230 VAC)	0.18	0.22	0.30	0.36	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8
4IK25GN-SW2 <input type="checkbox"/> /4GN <input type="checkbox"/> RA	Rated	0.29	0.34	0.48	0.57	0.71	0.86	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.8	8	8	8	8	8	8
	Starting	0.36	0.43	0.60	0.72	0.90	1.1	1.6	1.9	2.3	3.2	3.9	4.7	6.5	7.8	8	8	8	8	8	8
5IK40GN-CW2 <input type="checkbox"/> E /5GN <input type="checkbox"/> RA	Rated (220 VAC)	0.64	0.77	1.1	1.3	1.6	1.9	2.7	3.2	3.9	4.7	5.7	6.8	9.5	10	10	10	10	10	10	10
	Rated (230 VAC)	0.61	0.73	1.0	1.2	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
	Starting	0.36	0.43	0.60	0.72	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
5IK40GN-SW2 <input type="checkbox"/> /5GN <input type="checkbox"/> RA	Rated	0.61	0.73	1.0	1.2	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
	Starting	0.72	0.86	1.2	1.4	1.8	2.2	3.0	3.6	4.3	5.4	6.5	7.8	10	10	10	10	10	10	10	10
5IK60GE-CW2 <input type="checkbox"/> E /5GE <input type="checkbox"/> RA	Rated	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
	Starting	0.58	0.69	0.96	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20
5IK60GE-SW2 <input type="checkbox"/> /5GE <input type="checkbox"/> RA	Rated	0.92	1.1	1.5	1.8	2.3	2.8	3.8	4.6	5.5	7.7	8.1	9.7	13.5	16.2	20	20	20	20	20	20
	Starting	1.1	1.3	1.8	2.2	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20
5IK90GE-CW2 <input type="checkbox"/> E /5GE <input type="checkbox"/> RA	Rated	1.5	1.8	2.5	3.0	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
	Starting	0.81	0.97	1.4	1.6	2.0	2.4	3.4	4.1	4.9	6.8	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
5IK90GE-SW2 <input type="checkbox"/> /5GE <input type="checkbox"/> RA	Rated	1.4	1.7	2.3	2.8	3.5	4.2	5.8	6.9	8.3	11.6	12.2	14.7	20	20	20	20	20	20	20	20
	Starting	1.5	1.8	2.6	3.1	3.8	4.6	6.4	7.7	9.2	12.8	13.8	16.5	20	20	20	20	20	20	20	20

◇ Solid Shaft Type 60 Hz

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m










Model Motor/ Gearhead	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4IK25GN-CW2 <input type="checkbox"/> E /4GN <input type="checkbox"/> RA	Rated	0.26	0.31	0.43	0.51	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
	Starting (220 VAC)	0.17	0.20	0.28	0.33	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
	Starting (230 VAC)	0.18	0.22	0.30	0.36	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8
4IK25GN-SW2 <input type="checkbox"/> /4GN <input type="checkbox"/> RA	Rated	0.24	0.29	0.40	0.48	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8
	Starting	0.24	0.29	0.40	0.48	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
5IK40GN-CW2 <input type="checkbox"/> E /5GN <input type="checkbox"/> RA	Rated	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
	Starting	0.36	0.43	0.60	0.72	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
5IK40GN-SW2 <input type="checkbox"/> /5GN <input type="checkbox"/> RA	Rated	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
	Starting	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5IK60GE-CW2 <input type="checkbox"/> E /5GE <input type="checkbox"/> RA	Rated	0.83	0.99	1.4	1.7	2.1	2.5	3.4	4.1	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
	Starting	0.58	0.69	0.96	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20
5IK60GE-SW2 <input type="checkbox"/> /5GE <input type="checkbox"/> RA	Rated	0.78	0.93	1.3	1.6	1.9	2.3	3.2	3.9	4.7	6.5	6.8	8.2	11.4	13.7	17.1	20	20	20	20	20
	Starting	0.90	1.1	1.5	1.8	2.3	2.7	3.8	4.5	5.4	7.5	8.1	9.7	13.5	16.2	20	20	20	20	20	20
5IK90GE-CW2 <input type="checkbox"/> E /5GE <input type="checkbox"/> RA	Rated	1.2	1.5	2.1	2.5	3.1	3.7	5.1	6.2	7.4	10.3	10.9	13.1	18.2	20	20	20	20	20	20	20
	Starting	0.81	0.97	1.4	1.6	2.0	2.4	3.4	4.1	4.9	6.8	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
5IK90GE-SW2 <input type="checkbox"/> /5GE <input type="checkbox"/> RA	Rated	1.2	1.4	1.9	2.3	2.9	3.5	4.8	5.8	7.0	9.7	10.3	12.3	17.1	20	20	20	20	20	20	20
	Starting	1.3	1.5	2.1	2.5	3.2	3.8	5.3	6.3	7.6	10.5	11.3	13.6	18.9	20	20	20	20	20	20	20

● World K Series Reversible Motors

◇ Hollow Shaft Type 50 Hz

● All output shafts rotate opposite to the direction of motor shaft rotation.









Unit = N·m

Model Motor/ Gearhead	Speed r/min	500	416	300	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3
	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25GN-CW2   /4GN 	Rated	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
	Starting (220 VAC)	0.17	0.20	0.28	0.34	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
	Starting (230 VAC)	0.19	0.23	0.32	0.38	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
5RK40GN-CW2  	Rated	0.47	0.57	0.79	0.95	1.6	1.9	2.7	3.2	3.9	4.7	5.7	6.8	9.5	10	10	10	10	10	10	10
	Starting	0.41	0.49	0.68	0.81	1.2	1.5	2.0	2.4	2.9	3.6	4.4	5.2	7.3	8.7	10	10	10	10	10	10
5RK60GE-CW2  	Rated	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
	Starting (220 VAC)	0.63	0.76	1.1	1.3	1.9	2.3	3.2	3.8	4.5	6.3	6.8	8.2	11.3	13.6	17.0	20	20	20	20	20
	Starting (230 VAC)	0.71	0.85	1.2	1.4	2.1	2.5	3.5	4.2	5.1	7.1	7.6	9.1	12.7	15.2	19.0	20	20	20	20	20
5RK90GE-CW3  	Rated	1.1	1.3	1.8	2.2	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
	Starting	0.90	1.1	1.5	1.8	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20

◇ Hollow Shaft Type 60 Hz

● All output shafts rotate opposite to the direction of motor shaft rotation.









Unit = N·m

Model Motor/ Gearhead	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25GN-CW2  	Rated	0.20	0.24	0.34	0.41	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
	Starting	0.17	0.20	0.28	0.34	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
5RK40GN-CW2  	Rated	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
	Starting	0.39	0.47	0.65	0.78	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK60GE-CW2  	Rated	0.61	0.73	1.0	1.2	2.1	2.5	3.4	4.1	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
	Starting	0.57	0.68	0.95	1.1	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20
5RK90GE-CW3  	Rated	0.91	1.1	1.5	1.8	3.1	3.7	5.1	6.2	7.4	10.3	10.9	13.1	18.2	20	20	20	20	20	20	20
	Starting	0.89	1.1	1.5	1.8	2.7	3.2	4.4	5.3	6.4	8.9	9.6	11.5	15.9	19.1	20	20	20	20	20	20

◇ Solid Shaft Type 50 Hz

● All output shafts rotate opposite to the direction of motor shaft rotation.









Unit = N·m

Model Motor/ Gearhead	Speed r/min	500	416	300	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3
	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25GN-CW2  	Rated	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
	Starting (220 VAC)	0.21	0.25	0.35	0.42	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
	Starting (230 VAC)	0.24	0.29	0.40	0.48	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
5RK40GN-CW2  	Rated	0.64	0.77	1.1	1.3	1.6	1.9	2.7	3.2	3.9	4.7	5.7	6.8	9.5	10	10	10	10	10	10	10
	Starting	0.49	0.58	0.81	0.97	1.2	1.5	2.0	2.4	2.9	3.6	4.4	5.2	7.3	8.7	10	10	10	10	10	10
5RK60GE-CW2  	Rated	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
	Starting (220 VAC)	0.76	0.91	1.3	1.5	1.9	2.3	3.2	3.8	4.5	6.3	6.8	8.2	11.3	13.6	17.0	20	20	20	20	20
	Starting (230 VAC)	0.85	1.0	1.4	1.7	2.1	2.5	3.5	4.2	5.1	7.1	7.6	9.1	12.7	15.2	19.0	20	20	20	20	20
5RK90GE-CW3  	Rated	1.5	1.8	2.5	3.0	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
	Starting	1.1	1.3	1.8	2.2	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20

◇ Solid Shaft Type 60 Hz

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model Motor/ Gearhead	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
4RK25GN-CW2  	Rated	0.26	0.31	0.43	0.51	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
	Starting	0.21	0.25	0.35	0.42	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
5RK40GN-CW2  	Rated	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
	Starting	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK60GE-CW2  	Rated	0.83	0.99	1.4	1.7	2.1	2.5	3.4	4.1	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
	Starting	0.68	0.82	1.1	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20
5RK90GE-CW3  	Rated	1.2	1.5	2.1	2.5	3.1	3.7	5.1	6.2	7.4	10.3	10.9	13.1	18.2	20	20	20	20	20	20	20
	Starting	1.1	1.3	1.8	2.1	2.7	3.2	4.4	5.3	6.4	8.9	9.6	11.5	15.9	19.1	20	20	20	20	20	20

● World K Series Electromagnetic Brake Motors

◇ Hollow Shaft Type 50 Hz

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model	Speed r/min	500	416	300	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3
		Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150
4RK25GN-CW2ME /4GN□RH	Rated	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
	Starting	0.19	0.23	0.32	0.38	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
5RK40GN-CW2ME /5GN□RH	Rated	0.47	0.57	0.79	0.95	1.6	1.9	2.7	3.2	3.9	4.7	5.7	6.8	9.5	10	10	10	10	10	10	10
	Starting	0.41	0.49	0.68	0.81	1.2	1.5	2.0	2.4	2.9	3.6	4.4	5.2	7.3	8.7	10	10	10	10	10	10
5RK60GE-CW2ME /5GE□RH	Rated	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
	Starting	0.71	0.85	1.2	1.4	2.1	2.5	3.5	4.2	5.1	7.1	7.6	9.1	12.7	15.2	19.0	20	20	20	20	20
5RK90GE-CW2ME /5GE□RH	Rated	1.1	1.3	1.8	2.2	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
	Starting	0.90	1.1	1.5	1.8	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20

◇ Hollow Shaft Type 60 Hz

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
		Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150
4RK25GN-CW2ME /4GN□RH	Rated	0.20	0.24	0.34	0.41	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
	Starting	0.17	0.20	0.28	0.34	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
5RK40GN-CW2ME /5GN□RH	Rated	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
	Starting	0.39	0.47	0.65	0.78	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK60GE-CW2ME /5GE□RH	Rated	0.61	0.73	1.0	1.2	2.1	2.5	3.4	4.1	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
	Starting	0.57	0.68	0.95	1.1	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20
5RK90GE-CW2ME /5GE□RH	Rated	0.91	1.1	1.5	1.8	3.1	3.7	5.1	6.2	7.4	10.3	10.9	13.1	18.2	20	20	20	20	20	20	20
	Starting	0.89	1.1	1.5	1.8	2.7	3.2	4.4	5.3	6.4	8.9	9.6	11.5	15.9	19.1	20	20	20	20	20	20

◇ Solid Shaft Type 50 Hz

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model	Speed r/min	500	416	300	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3
		Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150
4RK25GN-CW2ME /4GN□RA	Rated	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
	Starting	0.24	0.29	0.40	0.48	0.60	0.72	1.1	1.3	1.6	2.2	2.6	3.1	4.3	5.2	6.5	7.8	8	8	8	8
5RK40GN-CW2ME /5GN□RA	Rated	0.64	0.77	1.1	1.3	1.6	1.9	2.7	3.2	3.9	4.7	5.7	6.8	9.5	10	10	10	10	10	10	10
	Starting	0.49	0.58	0.81	0.97	1.2	1.5	2.0	2.4	2.9	3.6	4.4	5.2	7.3	8.7	10	10	10	10	10	10
5RK60GE-CW2ME /5GE□RA	Rated	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
	Starting	0.85	1.0	1.4	1.7	2.1	2.5	3.5	4.2	5.1	7.1	7.6	9.1	12.7	15.2	19.0	20	20	20	20	20
5RK90GE-CW2ME /5GE□RA	Rated	1.5	1.8	2.5	3.0	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
	Starting	1.1	1.3	1.8	2.2	2.7	3.2	4.5	5.4	6.5	9.0	9.7	11.7	16.2	19.4	20	20	20	20	20	20

◇ Solid Shaft Type 60 Hz

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
		Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150
4RK25GN-CW2ME /4GN□RA	Rated	0.26	0.31	0.43	0.51	0.64	0.77	1.3	1.5	1.8	2.6	3.1	3.7	5.1	6.1	7.7	8	8	8	8	8
	Starting	0.21	0.25	0.35	0.42	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
5RK40GN-CW2ME /5GN□RA	Rated	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10
	Starting	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK60GE-CW2ME /5GE□RA	Rated	0.83	0.99	1.4	1.7	2.1	2.5	3.4	4.1	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20
	Starting	0.68	0.82	1.1	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20
5RK90GE-CW2ME /5GE□RA	Rated	1.2	1.5	2.1	2.5	3.1	3.7	5.1	6.2	7.4	10.3	10.9	13.1	18.2	20	20	20	20	20	20	20
	Starting	1.1	1.3	1.8	2.1	2.7	3.2	4.4	5.3	6.4	8.9	9.6	11.5	15.9	19.1	20	20	20	20	20	20

● Speed Control Motors **US Series**

◇ Hollow Shaft Type

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
Motor/ Gearhead	Motor Speed r/min																				
US425-402E2 /4GN□RH	1200 (50 Hz)	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
	1200 (220 VAC, 60 Hz)	0.19	0.23	0.32	0.38	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8
	1200 (230 VAC, 60 Hz)	0.17	0.20	0.28	0.34	0.53	0.63	1.1	1.3	1.5	2.1	2.5	3.0	4.2	5.0	6.3	7.6	8	8	8	8
	90	0.048	0.058	0.080	0.096	0.15	0.18	0.30	0.36	0.43	0.60	0.72	0.86	1.2	1.4	1.8	2.2	2.4	2.9	3.6	4.3
	90 (230 VAC, 50 Hz)	0.042	0.050	0.070	0.084	0.13	0.16	0.26	0.32	0.38	0.53	0.63	0.76	1.1	1.3	1.6	1.9	2.1	2.5	3.2	3.8
	Starting (220 VAC)	0.12	0.14	0.20	0.24	0.38	0.45	0.68	0.81	0.97	1.4	1.6	1.9	2.7	3.2	4.1	4.9	5.4	6.5	8	8
	Starting (230 VAC)	0.13	0.16	0.22	0.26	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
US540-402E2 /5GN□RH	1200 (50 Hz)	0.45	0.54	0.75	0.90	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
	1200 (60 Hz)	0.35	0.41	0.58	0.69	1.2	1.4	2.0	2.3	2.8	3.5	4.1	5.0	6.9	8.3	10	10	10	10	10	10
	90	0.095	0.11	0.16	0.19	0.32	0.39	0.54	0.64	0.77	0.95	1.1	1.4	1.9	2.3	2.8	3.4	3.8	4.5	5.7	6.8
	Starting	0.21	0.25	0.35	0.42	0.63	0.76	1.1	1.3	1.5	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	9.1	10	10
US560-502E2 /5GU□RH	Starting (220 VAC, 60 Hz)	0.19	0.23	0.31	0.38	0.56	0.68	0.94	1.1	1.4	1.7	2.0	2.4	3.4	4.1	5.1	6.1	6.8	8.1	10	10
	1200 (50 Hz)	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
	1200 (60 Hz)	0.68	0.81	1.1	1.4	2.3	2.8	3.8	4.6	5.5	7.7	8.1	9.7	13.5	16.2	20	20	20	20	20	20
	90 (50 Hz)	0.21	0.25	0.35	0.42	0.71	0.86	1.2	1.4	1.7	2.4	2.5	3.0	4.2	5.0	6.3	7.6	8.4	8.4	10.5	12.6
	90 (60 Hz)	0.24	0.29	0.40	0.48	0.82	0.98	1.4	1.6	2.0	2.7	2.9	3.5	4.8	5.8	7.2	8.6	9.6	9.6	12.0	14.4
	Starting	0.36	0.43	0.60	0.72	1.1	1.3	1.8	2.2	2.6	3.6	3.9	4.7	6.5	7.8	9.7	11.7	13.0	13.0	16.2	19.4
US590-502E2 /5GU□RH	Starting (220 VAC, 60 Hz)	0.32	0.38	0.53	0.63	0.95	1.1	1.6	1.9	2.3	3.2	3.4	4.1	5.7	6.8	8.5	10.2	11.3	11.3	14.2	17.0
	1200	1.1	1.3	1.8	2.2	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
	90 (50 Hz)	0.35	0.41	0.58	0.69	1.2	1.4	2.0	2.3	2.8	3.9	4.1	5.0	6.9	8.3	10.4	12.4	13.8	13.8	17.3	20
	90 (60 Hz)	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	4.4	4.7	5.6	7.8	9.4	11.7	14.0	15.6	15.6	19.5	20
	Starting (220 VAC)	0.54	0.65	0.90	1.1	1.6	1.9	2.7	3.2	3.9	5.4	5.8	7.0	9.7	11.7	14.6	17.5	19.4	19.4	20	20
Starting (230 VAC)	0.60	0.72	1.0	1.2	1.8	2.2	3.0	3.6	4.3	6.0	6.5	7.8	10.8	13.0	16.2	19.4	20	20	20	20	20

◇ Solid Shaft Type

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
Motor/ Gearhead	Motor Speed r/min																				
US425-402E2 /4GN□RA	1200 (50 Hz)	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8
	1200 (220 VAC, 60 Hz)	0.24	0.29	0.40	0.48	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8
	1200 (230 VAC, 60 Hz)	0.21	0.25	0.35	0.42	0.53	0.63	1.1	1.3	1.5	2.1	2.5	3.0	4.2	5.0	6.3	7.6	8	8	8	8
	90	0.060	0.072	0.10	0.12	0.15	0.18	0.30	0.36	0.43	0.60	0.72	0.86	1.2	1.4	1.8	2.2	2.4	2.9	3.6	4.3
	90 (230 VAC, 50 Hz)	0.053	0.063	0.088	0.11	0.13	0.16	0.26	0.32	0.38	0.53	0.63	0.76	1.1	1.3	1.6	1.9	2.1	2.5	3.2	3.8
	Starting (220 VAC)	0.15	0.18	0.25	0.30	0.38	0.45	0.68	0.81	0.97	1.4	1.6	1.9	2.7	3.2	4.1	4.9	5.4	6.5	8	8
	Starting (230 VAC)	0.17	0.20	0.28	0.33	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8
US540-402E2 /5GN□RA	1200 (50 Hz)	0.61	0.73	1.0	1.2	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10
	1200 (60 Hz)	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.5	4.1	5.0	6.9	8.3	10	10	10	10	10	10
	90	0.13	0.15	0.21	0.26	0.32	0.39	0.54	0.64	0.77	0.95	1.1	1.4	1.9	2.3	2.8	3.4	3.8	4.5	5.7	6.8
	Starting	0.25	0.30	0.42	0.50	0.63	0.76	1.1	1.3	1.5	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	9.1	10	10
US560-502E2 /5GU□RA	Starting (220 VAC, 60 Hz)	0.23	0.27	0.38	0.45	0.56	0.68	0.94	1.1	1.4	1.7	2.0	2.4	3.4	4.1	5.1	6.1	6.8	8.1	10	10
	1200 (50 Hz)	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
	1200 (60 Hz)	0.92	1.1	1.5	1.8	2.3	2.8	3.8	4.6	5.5	7.7	8.1	9.7	13.5	16.2	20	20	20	20	20	20
	90 (50 Hz)	0.29	0.34	0.48	0.57	0.71	0.86	1.2	1.4	1.7	2.4	2.5	3.0	4.2	5.0	6.3	7.6	8.4	8.4	10.5	12.6
	90 (60 Hz)	0.33	0.39	0.54	0.65	0.82	0.98	1.4	1.6	2.0	2.7	2.9	3.5	4.8	5.8	7.2	8.6	9.6	9.6	12.0	14.4
	Starting	0.43	0.52	0.72	0.86	1.1	1.3	1.8	2.2	2.6	3.6	3.9	4.7	6.5	7.8	9.7	11.7	13.0	13.0	16.2	19.4
US590-502E2 /5GU□RA	Starting (220 VAC, 60 Hz)	0.38	0.45	0.63	0.76	0.95	1.1	1.6	1.9	2.3	3.2	3.4	4.1	5.7	6.8	8.5	10.2	11.3	11.3	14.2	17.0
	1200	1.5	1.8	2.5	3.0	3.7	4.5	6.2	7.4	8.9	12.4	13.1	15.8	20	20	20	20	20	20	20	20
	90 (50 Hz)	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.9	4.1	5.0	6.9	8.3	10.4	12.4	13.8	13.8	17.3	20
	90 (60 Hz)	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	4.4	4.7	5.6	7.8	9.4	11.7	14.0	15.6	15.6	19.5	20
	Starting (220 VAC)	0.65	0.78	1.1	1.3	1.6	1.9	2.7	3.2	3.9	5.4	5.8	7.0	9.7	11.7	14.6	17.5	19.4	19.4	20	20
Starting (230 VAC)	0.72	0.86	1.2	1.4	1.8	2.2	3.0	3.6	4.3	6.0	6.5	7.8	10.8	13.0	16.2	19.4	20	20	20	20	20

- Introduction
- Induction Motors
- Reversible Motors
- Electro-magnetic Brake Motors
- Right-Angle Gearheads
- Brake Pack SB50W
- US AC Speed Control Motors
- ES02
- FE100/FE200 Inverter
- Watertight Dust-Resistant Motors
- Torque Motors
- Accessories
- Installation

● Speed Controller **ES02** + World **K** Series Speed Control Motors

◇ Induction Motors **Hollow Shaft Type**

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model		Gear Ratio																							
Motor/ Gearhead	Applicable Speed Controllers	Motor Speed r/min	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180			
4IK25RGN-CW2E /4GN□RH	ES02	1200 (50 Hz)	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8	8		
		1200 (220 VAC, 60 Hz)	0.19	0.23	0.32	0.38	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8	8	8	
		1200 (230 VAC, 60 Hz)	0.18	0.22	0.30	0.36	0.56	0.68	1.1	1.4	1.6	2.3	2.7	3.2	4.5	5.4	6.8	8	8	8	8	8	8	8	8
		90	0.048	0.058	0.080	0.096	0.15	0.18	0.30	0.36	0.43	0.60	0.72	0.86	1.2	1.4	1.8	2.2	2.4	2.9	3.6	4.3			
		Starting (220 VAC)	0.13	0.16	0.22	0.26	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8			
		Starting (230 VAC)	0.14	0.17	0.24	0.29	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8			
5IK40RGN-CW2E /5GN□RH	ES02	1200 (220 VAC, 50 Hz)	0.45	0.54	0.75	0.90	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10	10	10	
		1200 (220 VAC, 60 Hz)	0.42	0.50	0.70	0.84	1.4	1.7	2.4	2.9	3.4	4.2	5.0	6.0	8.4	10	10	10	10	10	10	10	10	10	
		1200 (230 VAC, 50 Hz)	0.48	0.58	0.80	0.96	1.6	2.0	2.7	3.3	3.9	4.8	5.8	6.9	9.6	10	10	10	10	10	10	10	10	10	
		1200 (230 VAC, 60 Hz)	0.39	0.47	0.65	0.78	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10	10	10	
		90 (220 VAC)	0.11	0.14	0.19	0.23	0.38	0.46	0.64	0.77	0.92	1.1	1.4	1.6	2.3	2.7	3.4	4.1	4.5	5.4	6.8	8.1			
		90 (230 VAC)	0.11	0.13	0.18	0.21	0.36	0.43	0.60	0.71	0.86	1.1	1.3	1.5	2.1	2.5	3.2	3.8	4.2	5.0	6.3	7.6			
		Starting (220 VAC)	0.29	0.34	0.48	0.57	0.86	1.0	1.4	1.7	2.1	2.6	3.1	3.7	5.1	6.2	7.7	9.2	10	10	10	10			
		Starting (230 VAC)	0.30	0.36	0.50	0.60	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10			
5IK60RGU-CWE /5GU□RH	ES02	1200 (220 VAC, 50 Hz)	0.69	0.83	1.2	1.4	2.3	2.8	3.9	4.7	5.6	7.8	8.3	9.9	13.8	16.6	20	20	20	20	20	20	20	20	
		1200	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20	20	20	
		90 (220 VAC, 50 Hz)	0.30	0.36	0.50	0.60	1.0	1.2	1.7	2.0	2.4	3.4	3.6	4.3	6.0	7.2	9.0	10.8	12.0	12.0	15.0	18.0			
		90 (220 VAC, 60 Hz)	0.32	0.39	0.54	0.65	1.1	1.3	1.8	2.2	2.6	3.7	3.9	4.6	6.5	7.7	9.7	11.6	12.9	12.9	16.1	19.4			
		90 (230 VAC, 50 Hz)	0.26	0.31	0.43	0.51	0.87	1.0	1.4	1.7	2.1	2.9	3.1	3.7	5.1	6.1	7.7	9.2	10.2	10.2	12.8	15.3			
		90 (230 VAC, 60 Hz)	0.27	0.32	0.45	0.54	0.92	1.1	1.5	1.8	2.2	3.1	3.2	3.9	5.4	6.5	8.1	9.7	10.8	10.8	13.5	16.2			
		Starting	0.48	0.58	0.80	0.96	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20			

◇ Induction Motors **Solid Shaft Type**

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model		Gear Ratio																						
Motor/ Gearhead	Applicable Speed Controllers	Motor Speed r/min	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180		
4IK25RGN-CW2E /4GN□RA	ES02	1200 (50 Hz)	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8	8	8	8	8	
		1200 (220 VAC, 60 Hz)	0.24	0.29	0.40	0.48	0.60	0.72	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.8	7.2	8	8	8	8	8	8	
		1200 (230 VAC, 60 Hz)	0.23	0.27	0.38	0.45	0.56	0.68	1.1	1.4	1.6	2.3	2.7	3.2	4.5	5.4	6.8	8	8	8	8	8	8	8
		90	0.060	0.072	0.10	0.12	0.15	0.18	0.30	0.36	0.43	0.60	0.72	0.86	1.2	1.4	1.8	2.2	2.4	2.9	3.6	4.3		
		Starting (220 VAC)	0.17	0.20	0.28	0.33	0.41	0.50	0.74	0.89	1.1	1.5	1.8	2.1	3.0	3.6	4.5	5.3	5.9	7.1	8	8		
		Starting (230 VAC)	0.18	0.22	0.30	0.36	0.45	0.54	0.81	0.97	1.2	1.6	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.8	8	8		
5IK40RGN-CW2E /5GN□RA	ES02	1200 (220 VAC, 50 Hz)	0.61	0.73	1.0	1.2	1.5	1.8	2.6	3.1	3.7	4.5	5.4	6.5	9.0	10	10	10	10	10	10	10	10	
		1200 (220 VAC, 60 Hz)	0.57	0.69	0.95	1.1	1.4	1.7	2.4	2.9	3.4	4.2	5.0	6.0	8.4	10	10	10	10	10	10	10	10	
		1200 (230 VAC, 50 Hz)	0.65	0.78	1.1	1.3	1.6	2.0	2.7	3.3	3.9	4.8	5.8	6.9	9.6	10	10	10	10	10	10	10	10	
		1200 (230 VAC, 60 Hz)	0.53	0.64	0.88	1.1	1.3	1.6	2.2	2.7	3.2	3.9	4.7	5.6	7.8	9.4	10	10	10	10	10	10	10	
		90 (220 VAC)	0.15	0.18	0.26	0.31	0.38	0.46	0.64	0.77	0.92	1.1	1.4	1.6	2.3	2.7	3.4	4.1	4.5	5.4	6.8	8.1		
		90 (230 VAC)	0.14	0.17	0.24	0.29	0.36	0.43	0.60	0.71	0.86	1.1	1.3	1.5	2.1	2.5	3.2	3.8	4.2	5.0	6.3	7.6		
		Starting (220 VAC)	0.34	0.41	0.57	0.68	0.86	1.0	1.4	1.7	2.1	2.6	3.1	3.7	5.1	6.2	7.7	9.2	10	10	10	10		
		Starting (230 VAC)	0.36	0.43	0.60	0.72	0.90	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10		
5IK60RGU-CWE /5GU□RH	ES02	1200 (220 VAC, 50 Hz)	0.94	1.1	1.6	1.9	2.3	2.8	3.9	4.7	5.6	7.8	8.3	9.9	13.8	16.6	20	20	20	20	20	20	20	
		1200	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20	20	
		90 (220 VAC, 50 Hz)	0.41	0.49	0.68	0.82	1.0	1.2	1.7	2.0	2.4	3.4	3.6	4.3	6.0	7.2	9.0	10.8	12.0	12.0	15.0	18.0		
		90 (220 VAC, 60 Hz)	0.44	0.53	0.73	0.88	1.1	1.3	1.8	2.2	2.6	3.7	3.9	4.6	6.5	7.7	9.7	11.6	12.9	12.9	16.1	19.4		
		90 (230 VAC, 50 Hz)	0.35	0.42	0.58	0.69	0.87	1.0	1.4	1.7	2.1	2.9	3.1	3.7	5.1	6.1	7.7	9.2	10.2	10.2	12.8	15.3		
		90 (230 VAC, 60 Hz)	0.37	0.44	0.61	0.73	0.92	1.1	1.5	1.8	2.2	3.1	3.2	3.9	5.4	6.5	8.1	9.7	10.8	10.8	13.5	16.2		
		Starting	0.58	0.69	0.96	1.2	1.4	1.7	2.4	2.9	3.5	4.8	5.2	6.2	8.6	10.4	13.0	15.6	17.3	17.3	20	20		

◇ Reversible Motors Hollow Shaft Type

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model		Gear Ratio																				
Motor/ Gearhead	Applicable Speed Controllers	Motor Speed r/min	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
			4RK25RGN-CW2E /4GN□RH	ES02	1200	0.25	0.30	0.41	0.49	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8
90 (50 Hz)	0.14	0.17			0.23	0.28	0.43	0.52	0.86	1.0	1.2	1.7	2.1	2.5	3.5	4.1	5.2	6.2	6.9	8	8	8
90 (60 Hz)	0.13	0.16			0.22	0.26	0.41	0.50	0.83	0.99	1.2	1.7	2.0	2.4	3.3	4.0	5.0	5.9	6.6	7.9	8	8
Starting	0.17	0.20			0.28	0.34	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
Starting (230 VAC, 50 Hz)	0.19	0.22			0.31	0.37	0.58	0.70	1.0	1.3	1.5	2.1	2.5	3.0	4.2	5.0	6.3	7.5	8	8	8	8
5RK40RGN-CW2E /5GN□RH	ES02	1200	0.48	0.58	0.80	0.96	1.6	2.0	2.7	3.3	3.9	4.8	5.8	6.9	9.6	10	10	10	10	10	10	10
		90 (220 VAC, 50 Hz)	0.27	0.32	0.45	0.54	0.92	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
		90	0.26	0.31	0.43	0.51	0.87	1.0	1.4	1.7	2.1	2.6	3.1	3.7	5.1	6.1	7.7	9.2	10	10	10	10
		Starting (50 Hz)	0.41	0.49	0.68	0.81	1.2	1.5	2.0	2.4	2.9	3.6	4.4	5.2	7.3	8.7	10	10	10	10	10	10
		Starting (60 Hz)	0.39	0.47	0.65	0.78	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK60RGU-CWE /5GU□RH	ES02	1200	0.74	0.88	1.2	1.5	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
		90	0.42	0.50	0.70	0.84	1.4	1.7	2.4	2.9	3.4	4.8	5.0	6.0	8.4	10.1	12.6	15.1	16.8	16.8	20	20
		Starting (220 VAC, 50 Hz)	0.63	0.76	1.1	1.3	1.9	2.3	3.2	3.8	4.5	6.3	6.8	8.2	11.3	13.6	17.0	20	20	20	20	20
		Starting (230 VAC, 50 Hz)	0.69	0.83	1.2	1.4	2.1	2.5	3.5	4.1	5.0	6.9	7.5	8.9	12.4	14.9	18.6	20	20	20	20	20
		Starting (60 Hz)	0.57	0.68	0.95	1.1	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20

◇ Reversible Motors Solid Shaft Type

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model		Gear Ratio																				
Motor/ Gearhead	Applicable Speed Controllers	Motor Speed r/min	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
			4RK25RGN-CW2E /4GN□RA	ES02	1200	0.31	0.37	0.51	0.62	0.77	0.92	1.5	1.8	2.2	3.1	3.7	4.4	6.2	7.4	8	8	8
90 (50 Hz)	0.17	0.21			0.29	0.35	0.43	0.52	0.86	1.0	1.2	1.7	2.1	2.5	3.5	4.1	5.2	6.2	6.9	8	8	8
90 (60 Hz)	0.17	0.20			0.28	0.33	0.41	0.50	0.83	0.99	1.2	1.7	2.0	2.4	3.3	4.0	5.0	5.9	6.6	7.9	8	8
Starting	0.21	0.25			0.35	0.42	0.53	0.63	0.95	1.1	1.4	1.9	2.3	2.7	3.8	4.5	5.7	6.8	7.6	8	8	8
Starting (230 VAC, 50 Hz)	0.23	0.28			0.39	0.47	0.58	0.70	1.0	1.3	1.5	2.1	2.5	3.0	4.2	5.0	6.3	7.5	8	8	8	8
5RK40RGN-CW2E /5GN□RA	ES02	1200	0.65	0.78	1.1	1.3	1.6	2.0	2.7	3.3	3.9	4.8	5.8	6.9	9.6	10	10	10	10	10	10	10
		90 (220 VAC, 50 Hz)	0.37	0.44	0.61	0.73	0.92	1.1	1.5	1.8	2.2	2.7	3.2	3.9	5.4	6.5	8.1	9.7	10	10	10	10
		90	0.35	0.42	0.58	0.69	0.87	1.0	1.4	1.7	2.1	2.6	3.1	3.7	5.1	6.1	7.7	9.2	10	10	10	10
		Starting (50 Hz)	0.49	0.58	0.81	0.97	1.2	1.5	2.0	2.4	2.9	3.6	4.4	5.2	7.3	8.7	10	10	10	10	10	10
		Starting (60 Hz)	0.47	0.56	0.78	0.94	1.2	1.4	2.0	2.3	2.8	3.5	4.2	5.1	7.0	8.4	10	10	10	10	10	10
5RK60RGU-CWE /5GU□RA	ES02	1200	1.0	1.2	1.7	2.0	2.5	3.0	4.2	5.0	6.0	8.3	8.8	10.6	14.7	17.6	20	20	20	20	20	20
		90	0.57	0.69	0.95	1.1	1.4	1.7	2.4	2.9	3.4	4.8	5.0	6.0	8.4	10.1	12.6	15.1	16.8	16.8	20	20
		Starting (220 VAC, 50 Hz)	0.76	0.91	1.3	1.5	1.9	2.3	3.2	3.8	4.5	6.3	6.8	8.2	11.3	13.6	17.0	20	20	20	20	20
		Starting (230 VAC, 50 Hz)	0.83	0.99	1.4	1.7	2.1	2.5	3.5	4.1	5.0	6.9	7.5	8.9	12.4	14.9	18.6	20	20	20	20	20
		Starting (60 Hz)	0.68	0.82	1.1	1.4	1.7	2.1	2.9	3.4	4.1	5.7	6.2	7.4	10.3	12.3	15.4	18.5	20	20	20	20

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AC Speed Control Motors

ES02

FE100/FE200
Inverter

Water-tight,
Dust-Resistant
Motors

Torque Motors

Accessories

Installation

● Inverter **FE100** + World **K** Series Induction Motors

◇ Hollow Shaft Type

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model		Gear Ratio																								
Motor/ Gearhead	Applicable Inverters	Set Frequency Hz (Set Speed r/min)		3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180			
4IK25GN-SW2 /4GN □RH	FE100C	6.6 (200)	Rated	-	-	-	-	-	0.75	1.1	1.3	1.6	2.5	3.0	3.7	4.4	5.3	6.6	8	8	8	8	8			
			Starting	-	-	-	-	-	0.75	0.99	1.2	1.5	2.3	2.7	3.3	3.9	4.8	6.0	7.2	8	8	8	8	8		
		10~50 (300~1500)	Rated	-	-	-	-	-	0.95	1.4	1.7	2.3	3.2	3.9	4.7	5.6	6.7	8	8	8	8	8	8	8	8	
			Starting	-	-	-	-	-	0.95	1.3	1.5	2.0	2.9	3.5	4.2	5.0	6.0	7.6	8	8	8	8	8	8	8	
		80 (2400)	Rated	-	-	-	-	-	0.23	0.65	0.82	1.0	1.5	2.0	2.4	2.9	3.5	4.4	5.3	6.4	7.7	9.3	11.1	13.4	16.2	
			Starting	-	-	-	-	-	0.23	0.58	0.74	0.92	1.3	1.8	2.1	2.6	3.1	3.9	4.7	5.7	6.8	8.1	9.7	11.6	14.0	
5IK40GN-SW2 /5GN □RH	FE100C	6.6~50 (200~1500)	Rated	-	-	-	-	1.3	1.6	2.5	3.0	3.6	5.1	6.2	7.4	8.9	10	10	10	10	10	10	10			
			Starting	-	-	-	-	1.1	1.4	2.2	2.7	3.2	4.6	5.6	6.7	8.0	9.6	10	10	10	10	10	10	10		
		80 (2400)	Rated	-	-	-	-	0.59	0.76	1.1	1.4	1.7	2.7	3.2	3.9	4.7	5.6	7.1	8.5	9.5	10	10	10	10	10	
			Starting	-	-	-	-	0.52	0.67	1.0	1.2	1.5	2.4	2.9	3.5	4.2	5.1	6.4	7.7	8.5	10	10	10	10	10	
		5IK60GE-SW2 /5GE □RH	FE100C	6.6 (200)	Rated	-	-	0.85	1.1	1.4	1.7	2.6	3.1	3.8	5.3	5.4	6.5	9.1	11.0	13.8	16.6	18.4	18.4	20	20	20
					Starting	-	-	0.85	1.1	1.2	1.5	2.3	2.7	3.3	4.7	4.9	5.9	8.2	9.9	12.4	14.9	16.6	16.6	20	20	20
10~50 (300~1500)	Rated			-	-	1.2	1.5	2.1	2.6	3.7	4.5	5.5	7.7	7.9	9.6	13.3	16.0	20	20	20	20	20	20	20	20	
	Starting			-	-	1.2	1.5	1.9	2.3	3.3	4.0	4.8	6.8	7.1	8.6	12.0	14.4	18.1	20	20	20	20	20	20	20	
80 (2400)	Rated			-	-	0.53	0.72	1.0	1.3	2.1	2.5	3.1	4.4	4.5	5.4	7.6	9.2	11.5	13.9	15.4	15.4	19.3	20	20	20	20
	Starting			-	-	0.53	0.72	0.89	1.1	1.8	2.2	2.7	3.9	4.1	4.9	6.9	8.3	10.4	12.5	13.9	13.9	17.4	20	20	20	20
5IK90GE-SW2 /5GE □RH	FE100C	6.6 (200)	Rated	-	-	1.3	1.6	2.2	2.7	3.8	4.6	5.5	7.7	7.9	9.6	13.3	16.0	20	20	20	20	20	20	20		
			Starting	-	-	1.3	1.6	1.9	2.4	3.3	4.0	4.9	6.8	7.2	8.6	12.0	14.4	18.1	20	20	20	20	20	20		
		10~60 (300~1800)	Rated	-	-	1.4	1.8	2.4	2.9	4.2	5.1	6.1	8.6	8.8	10.6	14.8	17.8	20	20	20	20	20	20	20	20	
			Starting	-	-	1.4	1.8	2.1	2.6	3.7	4.5	5.4	7.6	7.9	9.6	13.4	16.1	20	20	20	20	20	20	20	20	
		80 (2400)	Rated	-	-	0.85	1.1	1.5	2.0	2.9	3.6	4.3	6.1	6.3	7.6	10.6	12.8	16.0	19.3	20	20	20	20	20	20	
			Starting	-	-	0.85	1.1	1.3	1.8	2.6	3.2	3.8	5.4	5.7	6.8	9.6	11.5	14.4	17.4	19.3	19.3	20	20	20	20	

Note:

● Gear ratios not shown in the list of permissible torque are not available.

◇ Solid Shaft Type

● All output shafts rotate opposite to the direction of motor shaft rotation.

Unit = N·m

Model		Gear Ratio																								
Motor/ Gearhead	Applicable Inverters	Set Frequency Hz (Set Speed r/min)		3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180			
4IK25GN-SW2 /4GN □RA	FE100C	6.6 (200)	Rated	-	-	0.45	0.54	0.73	0.88	1.2	1.5	1.8	2.6	3.2	3.8	4.5	5.4	6.8	8	8	8	8	8	8		
			Starting	-	-	0.45	0.54	0.73	0.88	1.1	1.3	1.6	2.4	2.8	3.4	4.1	4.9	6.1	7.3	8	8	8	8	8		
		10~50 (300~1500)	Rated	-	-	0.43	0.74	0.93	1.1	1.5	1.9	2.4	3.3	4.0	4.8	5.7	6.8	8	8	8	8	8	8	8	8	
			Starting	-	-	0.43	0.74	0.93	1.1	1.4	1.7	2.2	3.0	3.6	4.3	5.1	6.2	7.7	8	8	8	8	8	8	8	
		80 (2400)	Rated	-	-	0.20	0.24	0.34	0.41	0.81	0.98	1.2	1.6	2.1	2.5	3.0	3.6	4.5	5.4	6.0	7.2	8	8	8	8	
			Starting	-	-	0.20	0.24	0.34	0.41	0.73	0.88	1.1	1.5	1.9	2.3	2.7	3.2	4.1	4.9	5.4	6.5	8	8	8	8	
5IK40GN-SW2 /5GN □RA	FE100C	6.6~50 (200~1500)	Rated	-	-	0.98	1.2	1.5	1.8	2.6	3.2	3.8	5.3	6.3	7.6	9.0	10	10	10	10	10	10	10			
			Starting	-	-	0.86	1.0	1.3	1.5	2.3	2.8	3.3	4.7	5.7	6.8	8.1	9.7	10	10	10	10	10	10	10		
		80 (2400)	Rated	-	-	0.32	0.38	0.78	0.94	1.3	1.6	1.9	2.8	3.4	4.0	4.8	5.8	7.2	8.6	9.6	10	10	10	10	10	
			Starting	-	-	0.28	0.34	0.69	0.83	1.1	1.4	1.7	2.5	3.0	3.6	4.3	5.2	6.5	7.8	8.6	10	10	10	10	10	
		5IK60GE-SW2 /5GE □RA	FE100C	6.6 (200)	Rated	-	-	1.0	1.2	1.5	1.8	2.7	3.3	3.9	5.4	5.6	6.7	9.3	11.2	14.0	16.7	18.6	18.6	20	20	20
					Starting	-	-	0.89	1.1	1.3	1.6	2.4	2.9	3.4	4.8	5.0	6.0	8.4	10.0	12.6	15.1	16.7	16.7	20	20	20
10~50 (300~1500)	Rated			-	-	1.5	1.8	2.4	2.8	3.9	4.7	5.7	7.9	8.1	9.7	13.5	16.2	20	20	20	20	20	20	20	20	
	Starting			-	-	1.3	1.5	2.1	2.5	3.5	4.2	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20	20	20	
80 (2400)	Rated			-	-	0.85	1.0	1.3	1.5	2.3	2.7	3.3	4.6	4.7	5.6	7.8	9.4	11.7	14.0	15.6	15.6	19.5	20	20	20	
	Starting			-	-	0.75	0.89	1.1	1.3	2.0	2.4	2.9	4.0	4.2	5.1	7.0	8.4	10.5	12.6	14.0	14.0	17.6	20	20	20	
5IK90GE-SW2 /5GE □RA	FE100C	6.6 (200)	Rated	0.88	1.1	1.5	1.8	2.4	2.8	3.9	4.7	5.7	7.9	8.1	9.7	13.5	16.2	20	20	20	20	20	20	20		
			Starting	0.77	0.93	1.3	1.5	2.1	2.5	3.5	4.2	5.0	6.9	7.3	8.7	12.2	14.6	18.2	20	20	20	20	20	20		
		10~60 (300~1800)	Rated	0.98	1.2	1.6	2.1	2.6	3.2	4.4	5.3	6.3	8.8	9.0	10.8	15.0	18.0	20	20	20	20	20	20	20	20	
			Starting	0.86	1.0	1.4	1.9	2.3	2.8	3.9	4.6	5.6	7.7	8.1	9.7	13.5	16.2	20	20	20	20	20	20	20	20	
		80 (2400)	Rated	0.70	0.84	1.2	1.4	1.8	2.3	3.2	3.8	4.5	6.3	6.5	7.8	10.8	13.0	16.2	19.4	20	20	20	20	20	20	
			Starting	0.62	0.74	1.0	1.2	1.5	2.0	2.8	3.3	4.0	5.6	5.8	7.0	9.7	11.7	14.6	17.5	19.4	19.4	20	20	20	20	

Note:

● Gear ratios not shown in the list of permissible torque are not available.