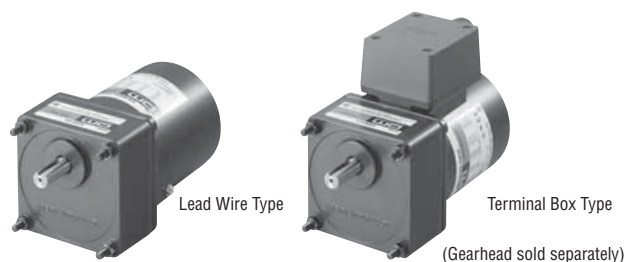


RoHS**Reversible Motors****40 W****Frame Size: □90 mm**

Right-angle gearheads (hollow shaft or solid shaft) can be combined.

Right-Angle Gearheads → Page 108

**Specifications – 30 Minutes Rating (RoHS)**

Model Upper Model Name: Pinion Shaft Type Lower Model Name (): Round Shaft Type		Output Power	Voltage	Frequency	Current	Starting Torque	Rated Torque	Rated Speed	Capacitor
Lead Wire Type Dimension ①	Terminal Box Type Dimension ②	W	VAC	Hz	A	mN·m	mN·m	r/min	μF
TP 5RK40GN-AW2J (5RK40A-AW2J)	5RK40GN-AW2TJ (5RK40A-AW2TJ)	40	Single-Phase 100	50	0.91	300	315	1250	16
				60	1.09	260	270	1450	
TP 5RK40GN-AW2U (5RK40A-AW2U)	5RK40GN-AW2TU (5RK40A-AW2TU)	40	Single-Phase 110 Single-Phase 115	60	0.88	260	270	1450	12
					0.87				
TP 5RK40GN-CW2J (5RK40A-CW2J)	5RK40GN-CW2TJ (5RK40A-CW2TJ)	40	Single-Phase 200	50	0.46	270	315	1250	4.0
				60	0.55	260	260	1500	
TP 5RK40GN-CW2E (5RK40A-CW2E)	5RK40GN-CW2TE (5RK40A-CW2TE)	40	Single-Phase 220	50	0.43	270	315	1250	3.5
				60	0.48	260	260	1500	
			Single-Phase 230	50	0.43	270	315	1250	
				60	0.48	260	260	1500	

● Values shown for rated torque and starting torque are measured for operation without the friction brake installed.

● The **J**, **U** and **E** at the end of the model name indicate that the unit includes a capacitor. These letters are not listed on the motor nameplate. When the motor is approved under various safety standards, the model name on the nameplate is the approved model name.

TP: Contains a built-in thermal protector. If a motor overheats for any reason, the thermal protector is opened and the motor stops.

When the motor temperature drops, the thermal protector closes and the motor restarts. Be sure to turn the motor off before inspecting.

Product Line**● Motor (RoHS)**

Type	Model	
	Pinion Shaft Type	Round Shaft Type
Lead Wire	5RK40GN-AW2J	5RK40A-AW2J
	5RK40GN-AW2U	5RK40A-AW2U
	5RK40GN-CW2J	5RK40A-CW2J
	5RK40GN-CW2E	5RK40A-CW2E
Terminal Box	5RK40GN-AW2TJ	5RK40A-AW2TJ
	5RK40GN-AW2TU	5RK40A-AW2TU
	5RK40GN-CW2TJ	5RK40A-CW2TJ
	5RK40GN-CW2TE	5RK40A-CW2TE

● Gearhead/Right-Angle Gearhead (Sold Separately) (RoHS)

Type	Gearhead Model	Gear Ratio
Long Life/Low Noise/ Parallel Shaft	5GN□S	3, 3.6, 5, 6, 7.5, 9, 12.5, 15, 18, 25, 30, 36, 50, 60, 75, 90, 100, 120, 150, 180
	5GN10XS (Decimal gearhead)	
Right-Angle/ Hollow Shaft	5GN□RH	3, 3.6, 5, 6, 7.5, 9, 12.5, 15, 18, 25, 30, 36, 50, 60, 75, 90, 100, 120, 150, 180
Right-Angle/ Solid Shaft	5GN□RA	3, 3.6, 5, 6, 7.5, 9, 12.5, 15, 18, 25, 30, 36, 50, 60, 75, 90, 100, 120, 150, 180

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

Gearmotor – Torque Table

- Gearheads and decimal gearheads are sold separately.
- 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.
- A colored background indicates gear shaft rotation in the same direction as the motor shaft, while the others rotate in the opposite direction.
- The speed is calculated by dividing the motor's synchronous speed (50 Hz: 1500 r/min, 60 Hz: 1800 r/min) by the gear ratio.
The actual speed is 2 - 20% less than the displayed value, depending on the size of the load.
- To reduce the speed beyond the gear ratio in the table, attach a decimal gearhead (gear ratio: 10) between the gearhead and the motor.
In that case, the permissible torque is 10 N·m.

◇ 50 Hz

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
Motor/ Gearhead	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
5RK40GN-AW2 J 5RK40GN-CW2 J 5RK40GN-CW2 E	5GN S	0.77	0.92	1.3	1.5	1.9	2.3	3.2	3.8	4.6	5.7	6.9	8.3	10	10	10	10	10	10	10	10

◇ 60 Hz

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
Motor/ Gearhead	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
5RK40GN-AW2 J 5RK40GN-AW2 U	5GN S	0.66	0.79	1.1	1.3	1.6	2.0	2.7	3.3	3.9	4.9	5.9	7.1	8.9	10	10	10	10	10	10	10
5RK40GN-CW2 J 5RK40GN-CW2 E	5GN S	0.63	0.76	1.1	1.3	1.6	1.9	2.6	3.2	3.8	4.7	5.7	6.8	8.6	10	10	10	10	10	10	10

Permissible Overhung Load and Permissible Thrust Load

Motor (Round shaft type) → Page 107

Gearhead → Page 107

Permissible Load Inertia J for Gearhead

→ Page 107

Dimensions (Unit = mm)

Mounting screws are included with gearheads.

◇ Lead Wire Type ①

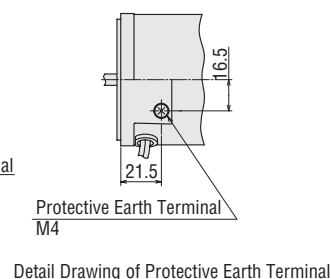
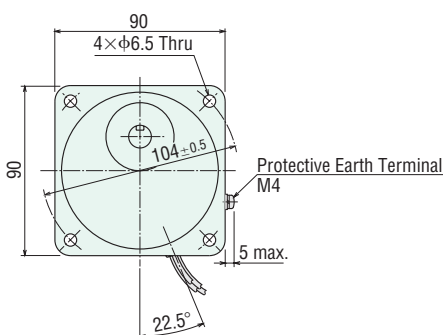
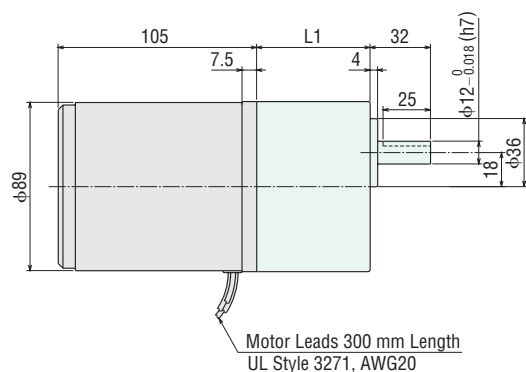
Mass: Motor 2.5 kg

Gearhead 1.5 kg

Motor Model	Gearhead Model	Gear Ratio	L1
5RK40GN-AW2 	5GN S	3~18	42
5RK40GN-CW2 		25~180	60

- Specify the type of the capacitor to be included by entering **J**, **U** or **E** in the box (□) within the model name.




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



◇ Terminal Box Type ②

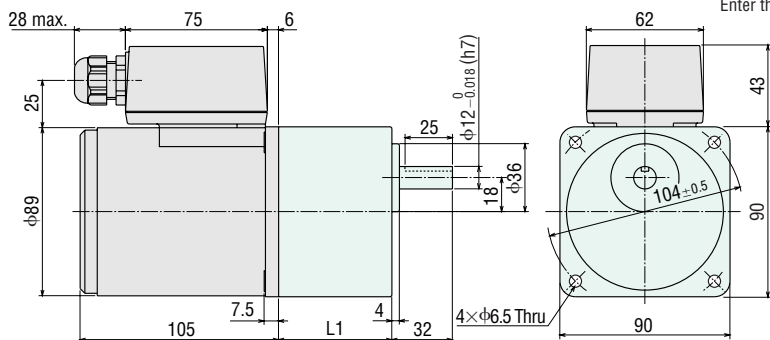
Mass: Motor 2.6 kg

Gearhead 1.5 kg

Motor Model	Gearhead Model	Gear Ratio	L1
5RK40GN-AW2T 	5GN 	3~18	42
5RK40GN-CW2T 		25~180	60

Specify the type of the capacitor to be included by entering **J**, **U** or **E** in the box () within the model name.

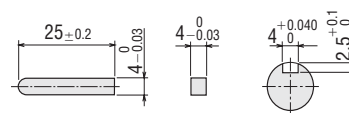
Enter the gear ratio in the box () within the model name.



● Use cable with a diameter of $\phi 6 \sim \phi 12$ mm.

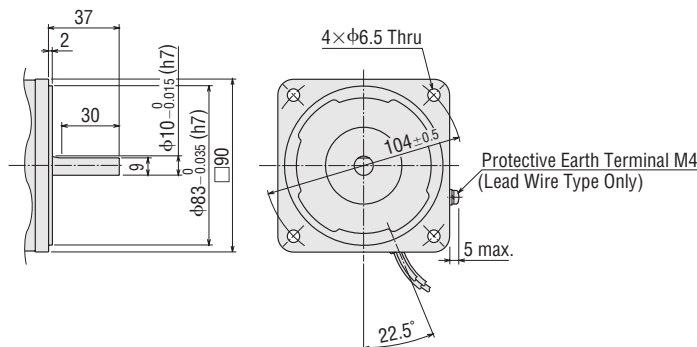
◇ Key and Key Slot

(The key is included with the gearhead)



◇ Shaft Section of Round Shaft Type

The mass and motor's dimensions (excluding the shaft section) are the same as those of the pinion shaft type.

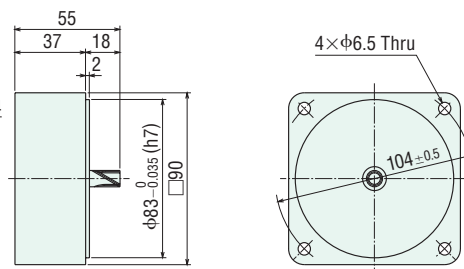


◇ Decimal Gearhead

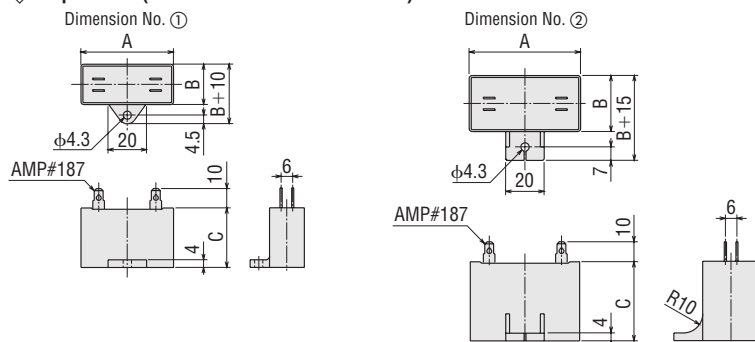
Can be connected to **GN** pinion shaft type.

5GN10XS

Mass: 0.6 kg



◇ Capacitor (Included with the motors)

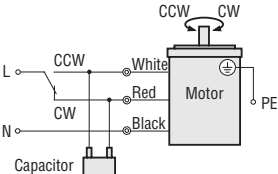
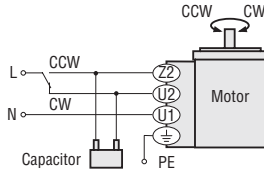


◇ Capacitor Dimensions (mm)

Model Upper Model Name: Pinion Shaft Type Lower Model Name (): Round Shaft Type		Capacitor Model	A	B	C	Mass (g)	Dimension No.	Capacitor Cap
Lead Wire Type	Terminal Box Type							
5RK40GN-AW2J (5RK40A-AW2J)	5RK40GN-AW2TJ (5RK40A-AW2TJ)	CH160CFAUL2	58	23.5	37	75	㊦	Included
5RK40GN-AW2U (5RK40A-AW2U)	5RK40GN-AW2TU (5RK40A-AW2TU)	CH120CFAUL2	58	22	35	60	㊥	
5RK40GN-CW2J (5RK40A-CW2J)	5RK40GN-CW2TJ (5RK40A-CW2TJ)	CH40BFAUL	58	23.5	37	70	㊦	
5RK40GN-CW2E (5RK40A-CW2E)	5RK40GN-CW2TE (5RK40A-CW2TE)	CH35BFAUL	58	22	35	55	㊥	

Connection Diagrams

- The direction of motor rotation is as viewed from the shaft end of the motor. CW represents the clockwise direction, while CCW represents the counterclockwise direction.
- Connection diagrams are also valid for the equivalent round shaft type.
- Specify the type of the capacitor to be included by entering **J**, **U** or **E** in the box (□) within the model name.

Lead Wire Type	Terminal Box Type
5RK40GN-AW2 □ 5RK40GN-CW2 □	5RK40GN-AW2T □ 5RK40GN-CW2T □
 <p>Clockwise To rotate the motor in a clockwise (CW) direction, turn the switch to CW.</p> <p>Counterclockwise To rotate the motor in a counterclockwise (CCW) direction, turn the switch to CCW.</p>	 <p>Clockwise To rotate the motor in a clockwise (CW) direction, turn the switch to CW.</p> <p>Counterclockwise To rotate the motor in a counterclockwise (CCW) direction, turn the switch to CCW.</p>

PE: Protective Earth

Note:

Connect a CR circuit to the forward/reverse select switch to protect the contact.

EPCR1201-2 is available as an optional surge suppressor. → Page 123