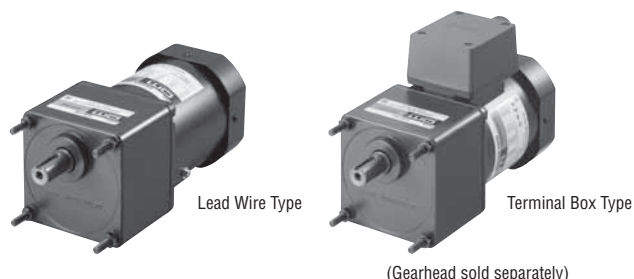


RoHS

Reversible Motors

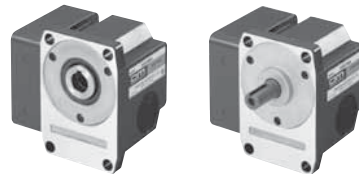
60 W

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 5RK60GE-AW2J (5RK60A-AW2J)	5RK60GE-AW2TJ (5RK60A-AW2TJ)	60	Single-Phase 100	50	1.35	470	490	1200	25
				60	1.52	380	405	1450	
TP 5RK60GE-AW2U (5RK60A-AW2U)	5RK60GE-AW2TU (5RK60A-AW2TU)	60	Single-Phase 110	60	1.27	380	405	1450	20
			Single-Phase 115						
TP 5RK60GE-CW2J (5RK60A-CW2J)	5RK60GE-CW2TJ (5RK60A-CW2TJ)	60	Single-Phase 200	50	0.66	450	490	1200	6.0
				60	0.79	380	405	1450	
TP 5RK60GE-CW2E (5RK60A-CW2E)	5RK60GE-CW2TE (5RK60A-CW2TE)	60	Single-Phase 220	50	0.61	420	490	1200	5.0
				60	0.67	380	405	1450	
			Single-Phase 230	50	0.63	470	490	1200	
				60	0.66	380	405	1450	

● 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	5RK60GE-AW2J	5RK60A-AW2J
	5RK60GE-AW2U	5RK60A-AW2U
	5RK60GE-CW2J	5RK60A-CW2J
	5RK60GE-CW2E	5RK60A-CW2E
Terminal Box	5RK60GE-AW2TJ	5RK60A-AW2TJ
	5RK60GE-AW2TU	5RK60A-AW2TU
	5RK60GE-CW2TJ	5RK60A-CW2TJ
	5RK60GE-CW2TE	5RK60A-CW2TE

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

Type	Gearhead Model	Gear Ratio
Long Life/ Parallel Shaft	5GE□S	3, 3.6, 5, 6, 7.5, 9, 12.5, 15, 18, 25, 30, 36, 50, 60, 75, 90, 100, 120, 150, 180
	5GE10XS (Decimal gearhead)	
Right-Angle/ Hollow Shaft	5GE□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	5GE□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 20 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
5RK60GE-AW2□J 5RK60GE-CW2□J 5RK60GE-CW2□E	5GE□S	1.2	1.4	2.0	2.4	3.0	3.6	4.5	5.4	6.4	8.1	9.7	11.6	16.2	19.4	20	20	20	20	20	20

◇ 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
5RK60GE-AW2□J 5RK60GE-AW2□U 5RK60GE-CW2□J 5RK60GE-CW2□E	5GE□S	0.98	1.2	1.6	2.0	2.5	3.0	3.7	4.4	5.3	6.7	8.0	9.6	13.4	16.0	17.9	20	20	20	20	20

Permissible Overhung Load and Permissible Thrust Load

Motor (Round shaft type) → Page 107

Gearhead → Page 107

Permissible Load Inertia J for Gearhead

→ Page 107

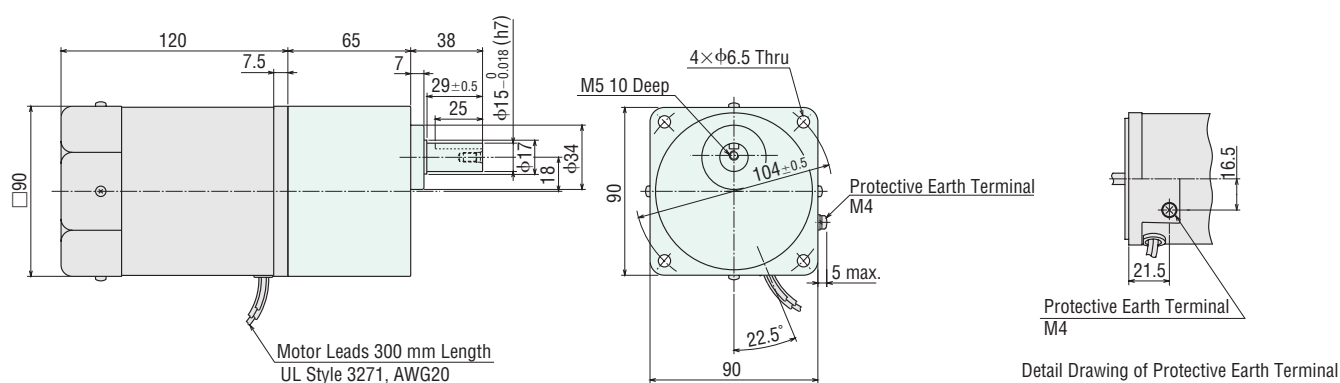
Dimensions (Unit = mm)

Mounting screws are included with gearheads.

◇ Lead Wire Type ①

Mass: Motor 2.7 kg

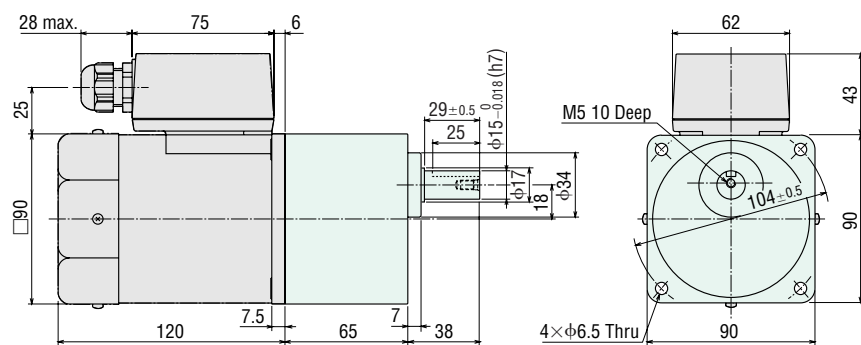
Gearhead 1.5 kg



◇ Terminal Box Type ②

Mass: Motor 2.8 kg

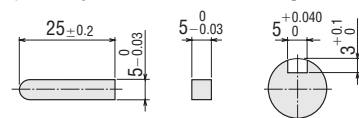
Gearhead 1.5 kg



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

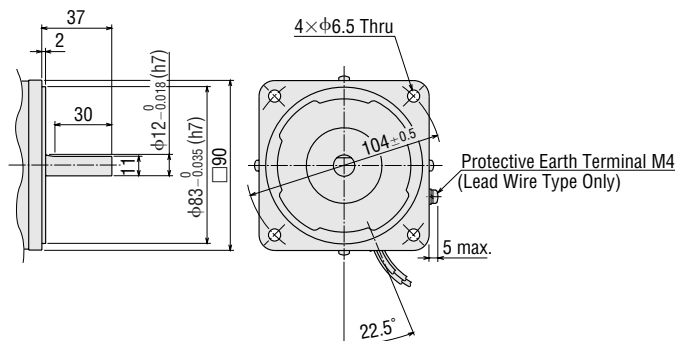
◇ Key and Key Slot

(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.

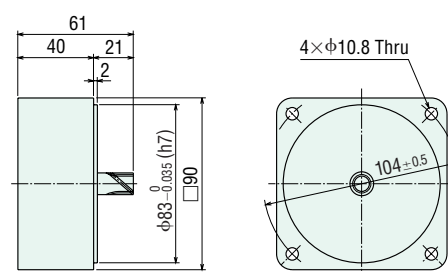


◇ Decimal Gearhead

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

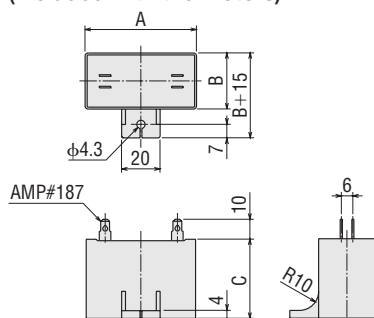
5GE10XS

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)	Capacitor Cap
Lead Wire Type	Terminal Box Type						
5RK60GE-AW2J (5RK60A-AW2J)	5RK60GE-AW2TJ (5RK60A-AW2TJ)	CH250CFAUL2	58	35	50	140	Included
5RK60GE-AW2U (5RK60A-AW2U)	5RK60GE-AW2TU (5RK60A-AW2TU)	CH200CFAUL2	58	29	41	95	
5RK60GE-CW2J (5RK60A-CW2J)	5RK60GE-CW2TJ (5RK60A-CW2TJ)	CH60BFAUL	58	29	41	85	
5RK60GE-CW2E (5RK60A-CW2E)	5RK60GE-CW2TE (5RK60A-CW2TE)	CH50BFAUL	58	29	41	85	

■ 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
5RK60GE-AW2 <input type="checkbox"/> 5RK60GE-CW2 <input type="checkbox"/>	5RK60GE-AW2T <input type="checkbox"/> 5RK60GE-CW2T <input type="checkbox"/>
<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