RoHS

Reversible Motors

6 W

Frame Size: □60 mm

Lead Wire Type

Terminal Box Type

(Gearhead sold separately)

■Specifications – 30 Minutes Rating RoHS

cULus CE

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
ZP **2RK6GN-AW2J (2RK6A-AW2J)**	**2RK6GN-AW2TJ (2RK6A-AW2TJ)**	6	Single-Phase 100	50	0.257	50	49	1150	4.5
				60	0.307	45	41	1400	
ZP **2RK6GN-AW2U (2RK6A-AW2U)**	**2RK6GN-AW2TU (2RK6A-AW2TU)**	6	Single-Phase 110	60	0.251	45	41	1450	3.5
			Single-Phase 115		0.256				
ZP **2RK6GN-CW2J (2RK6A-CW2J)**	**2RK6GN-CW2TJ (2RK6A-CW2TJ)**	6	Single-Phase 200	50	0.120	50	49	1150	1.0
				60	0.138	45	41	1400	
ZP **2RK6GN-CW2E (2RK6A-CW2E)**	**2RK6GN-CW2TE (2RK6A-CW2TE)**	6	Single-Phase 220	50	0.113	45	49	1150	0.8
				60	0.117		41	1450	
			Single-Phase 230	50	0.117	50	49	1200	
				60	0.120	45	41	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.

ZP: Impedance protected

■Product Line

●Motor RoHS

Type	Model	
	Pinion Shaft Type	Round Shaft Type
Lead Wire	**2RK6GN-AW2J**	**2RK6A-AW2J**
	2RK6GN-AW2U	**2RK6A-AW2U**
	2RK6GN-CW2J	**2RK6A-CW2J**
	2RK6GN-CW2E	**2RK6A-CW2E**
Terminal Box	**2RK6GN-AW2TJ**	**2RK6A-AW2TJ**
	2RK6GN-AW2TU	**2RK6A-AW2TU**
	2RK6GN-CW2TJ	**2RK6A-CW2TJ**
	2RK6GN-CW2TE	**2RK6A-CW2TE**

●Gearhead (Sold Separately) RoHS

Type	Gearhead Model	Gear Ratio
Long Life/Low Noise/ Parallel Shaft	**2GN□S**	**3, 3.6, 5, 6, 7.5, 9, 12.5, 15, 18, 25, 30, 36, 50, 60, 75, 90, 100, 120, 150, 180**
	2GN10XS (Decimal gearhead)	

- 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 3 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**
2RK6GN-AW2□J **2RK6GN-CW2□J** **2RK6GN-CW2□E**	**2GN□S**	0.12	0.14	0.20	0.24	0.30	0.36	0.50	0.60	0.71	0.89	1.1	1.3	1.6	1.9	2.4	2.9	3	3	3	3

◇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**
2RK6GN-AW2□J **2RK6GN-AW2□U** **2RK6GN-CW2□J** **2RK6GN-CW2□E**	**2GN□S**	0.10	0.12	0.17	0.20	0.25	0.30	0.42	0.50	0.60	0.75	0.90	1.1	1.4	1.6	2.0	2.4	2.7	3	3	3

Permissible Overhung Load and Permissible Thrust Load

Motor (Round shaft type) ➜ Page 107
Gearhead ➜ Page 107

Permissible Load Inertia J for Gearhead

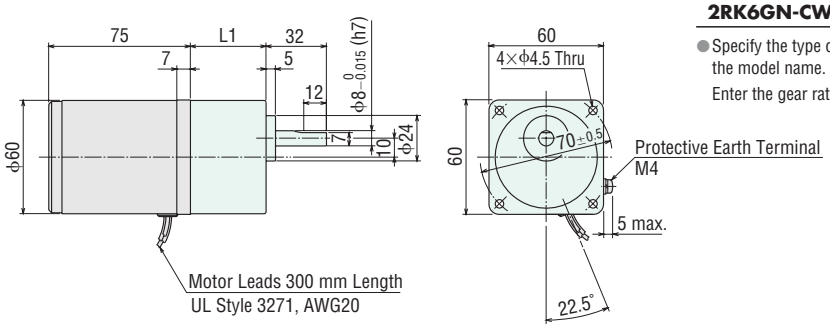
➜ Page 107

Dimensions (Unit = mm)

Mounting screws are included with gearheads.

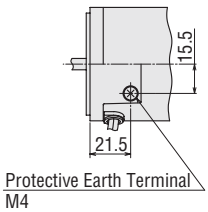
◇Lead Wire Type ①

Mass: Motor 0.7 kg
Gearhead 0.4 kg



Motor Model	Gearhead Model	Gear Ratio	L1
2RK6GN-AW2□ **2RK6GN-CW2□**	**2GN□S**	**3**～**18**	30
		25～**180**	40

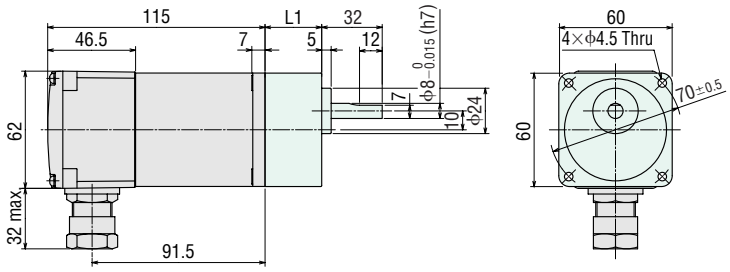
- Specify the type of the capacitor to be included by entering **J**, **U** or **E** in the box (□) within the model name.
  Enter the gear ratio in the box (□) within the model name.



Detail Drawing of Protective Earth Terminal

◇Terminal Box Type ②

Mass: Motor 0.9 kg
Gearhead 0.4 kg



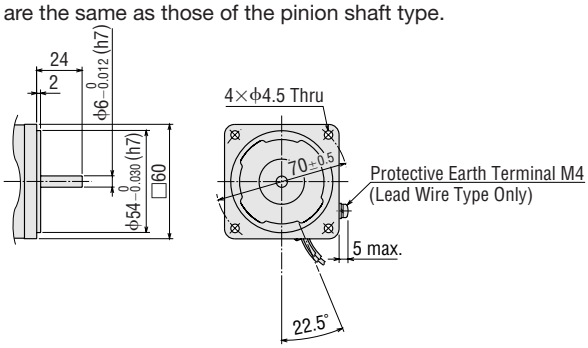
Motor Model	Gearhead Model	Gear Ratio	L1
2RK6GN-AW2T□ **2RK6GN-CW2T□**	**2GN□S**	**3~18**	30
		25~180	40

- 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 ϕ8 ~ ϕ12 mm.

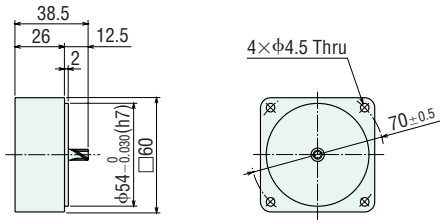
◇Shaft Section of Round Shaft Type

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

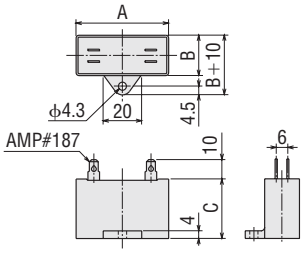


◇Decimal Gearhead

Can be connected to **GN** pinion shaft type.
2GN10XS
Mass: 0.2 kg



◇Capacitor
(Included with the motors)

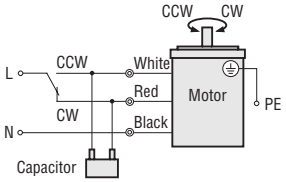
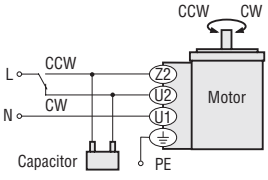


◇Capacitor Dimensions (mm)

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						
2RK6GN-AW2J (2RK6A-AW2J)	**2RK6GN-AW2TJ (2RK6A-AW2TJ)**	CH45FAUL2	37	18	27	30	Included
2RK6GN-AW2U (2RK6A-AW2U)	**2RK6GN-AW2TU (2RK6A-AW2TU)**	CH35FAUL2	31	17	27	25	
2RK6GN-CW2J (2RK6A-CW2J)	**2RK6GN-CW2TJ (2RK6A-CW2TJ)**	CH10BFAUL	37	18	27	30	
2RK6GN-CW2E (2RK6A-CW2E)	**2RK6GN-CW2TE (2RK6A-CW2TE)**	CH08BFAUL	31	17	27	20	

■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
2RK6GN-AW2□ **2RK6GN-CW2□**	**2RK6GN-AW2T□** **2RK6GN-CW2T□**
	
Clockwise To rotate the motor in a clockwise (CW) direction, turn the switch to CW. **Counterclockwise** To rotate the motor in a counterclockwise (CCW) direction, turn the switch to CCW.	**Clockwise** To rotate the motor in a clockwise (CW) direction, turn the switch to CW. **Counterclockwise** To rotate the motor in a counterclockwise (CCW) direction, turn the switch to CCW.

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