

Reversible Motors

15 W

70 mm



Gearhead shown in the photograph is sold separately

Specifications – 30 Minutes Rating (RoHS)



Product Name and Type Lead Wire Type		Output Power W	Voltage VAC	Frequency Hz	Current A	Starting Torque mN-m	Rated Torque mN-m	Rated Speed r/min	Capacitor μF	
Pinion Shaft Type	Round Shaft Type									
TP 3RK15GN-CW2E	TP 3RK15A-CW2E	15	Single-Phase 220	50	0.20	100	125	1200	1.5	
				60	0.21		105	1450		
				Single-Phase 230	50		0.20	125		1200
					60		0.21	105		1450

- The rated torque and the starting torque of reversible motors are shown without the friction brake installed.
- The product name listed on the motor nameplate does not include the code (E) that indicates the type of capacitor. Certification regarding various safety standards is acquired for the product name on the motor nameplate, please visit www.orientalmotor.eu.
- Safety standards → Page H-2
- (TP): This indicates that there is a built-in thermal protector (automatic return type). If a motor overheats for any reason, the thermal protector is activated and the motor is stopped. When the motor temperature drops, the thermal protector closes and the motor restarts automatically. Be sure to turn the power supply off before inspecting.

Degree of Protection

Type	Product Name		Degree of Protection
	Pinion Shaft Type	Round Shaft Type	
Lead Wire	3RK15GN-CW2E	3RK15A-CW2E	IP20

Product Line

Motors (RoHS)

Type	Product Name	
	Pinion Shaft Type	Round Shaft Type
Lead Wire	3RK15GN-CW2E	3RK15A-CW2E

The following items are included in each product.
Motor, Capacitor, Capacitor Cap, Operating Manual

Parallel Shaft Gearheads (Sold separately) (RoHS)

These products can be attached to pinion shafts.

Gearhead Type		Gearhead Product Name	Gear Ratio
Parallel Shaft	Long Life, Low Noise	3GN□S	3~180
	GN-S Gearhead	3GN10XS (Decimal Gearhead)	

- A number indicating the gear ratio is entered where the box □ is located within the gearhead product name.

The following items are included in each product.
Gearhead, Mounting Screws, Parallel Key, Operating Manual

High Strength, Long Life, Low Noise
V Series

Highest Maximum Permissible torque, 10,000 hours* of life and quiet operation. For more details on V Series see page C-149. *For the rated life time definition, refer to "Service Life of Gearheads" on page G-35.



Permissible Torque When Gearhead is Attached

- A number indicating the gear ratio is entered where the box □ is located within the gearhead product name.
- A colored background □ indicates gear shaft rotation in the same direction as the motor shaft. 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 to 20% less than the displayed value, depending on the load.
- To reduce the speed beyond the gear ratio in the table, attach a decimal gearhead of gear ratio 1:10 between the gearhead and the motor.

In that case, the permissible torque is 5 N·m.

◇ 50 Hz

Product Name	Speed r/min	500	417	300	250	200	167	120	100	83	60	50	42	30	25	20	17	15	12.5	10	8.3
		Unit = N·m																			
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
3RK15GN-CW2E / 3GN□S		0.30	0.36	0.51	0.61	0.76	0.91	1.3	1.5	1.8	2.3	2.7	3.3	4.1	5	5	5	5	5	5	5

◇ 60 Hz

Product Name	Speed r/min	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
		Unit = N·m																			
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
3RK15GN-CW2E / 3GN□S		0.26	0.31	0.43	0.51	0.64	0.77	1.1	1.3	1.5	1.9	2.3	2.8	3.5	4.2	5	5	5	5	5	5

Permissible Overhung Load and Permissible Thrust Load

Motors (Round shaft type) → Page C-16

Gearheads → Page C-16

Permissible Load Inertia: J of Gearhead

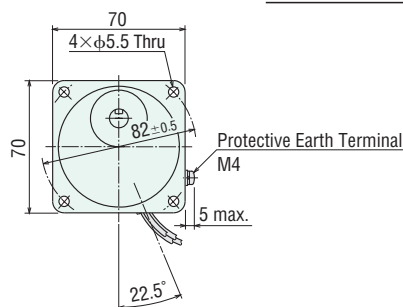
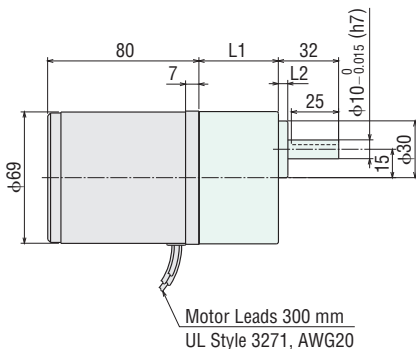
→ Page C-17

Dimensions (Unit = mm)

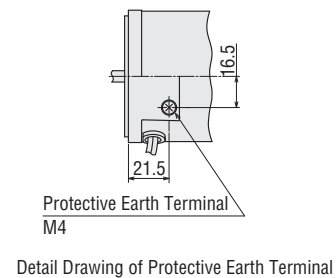
- Mounting screws are included with gearheads. Dimensions for mounting screws → Page C-254
- A number indicating the gear ratio is entered where the box □ is located within the product name.

◇ Lead Wire Type

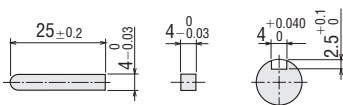
Mass: Motor 1.1 kg
Gearhead 0.55 kg



Motor Product Name	Gearhead Product Name	Gear Ratio	L1	L2
3RK15GN-CW2E	3GN□S	3~18	32	5
		25~180	42	



◇ Key and Key Slot (The key is included with the gearhead.)



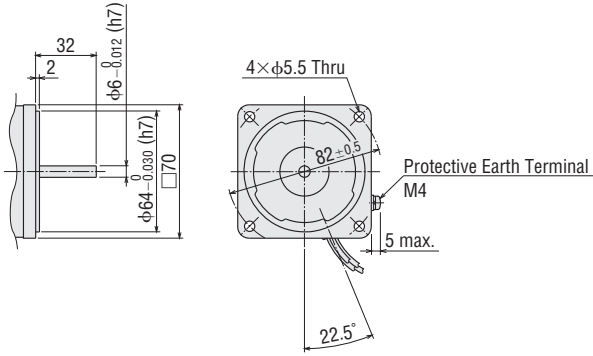
Reversible Motors

6 W

◇ Shaft Section of Round Shaft Type

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

Mass: 1.1 kg

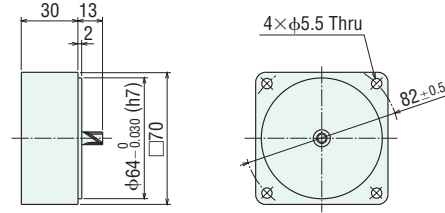


◇ Decimal Gearhead

This can be attached to the **GN** pinion shaft type.

3GN10X5

Mass: 0.3 kg

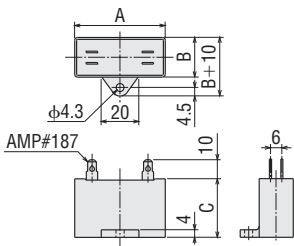


15 W

25 W

40 W

◇ Capacitor (Included)



◇ Capacitor Dimensions (mm)

Product Name		Capacitor Product Name	A	B	C	Mass (g)	Capacitor Cap
Pinion Shaft Type	Round Shaft Type						
3RK15GN-CW2E	3RK15A-CW2E	CH15BFAUL	38	21	31	37	Included

60 W

90 W

■ Connection Diagrams

→ Page C-80

Peripheral Equipment

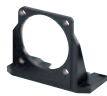
Instantaneous Stop

Brake Pack
→ Page C-229



Accessories

Mounting Brackets
→ Page C-240



Couplings
→ Page C-245

