Induction Motors

6 W

□60 mm


Lead Wire Type


Terminal Box Type

Gearheads shown in the photograph are sold separately.

Specifications – Continuous Rating RoHS

Product Name and Type Upper Product Name: Pinion Shaft Type Lower Product Name in ( ): Round Shaft Type		Output Power	Voltage	Frequency	Current	Starting Torque	Rated Torque	Rated Speed	Capacitor
Lead Wire Type Dimensions ①	Terminal Box Type Dimensions ②	W	VAC	Hz	A	mN·m	mN·m	r/min	μF
ZP **2IK6GN-CW2E** (**2IK6A-CW2E**)	ZP **2IK6GN-CW2BE** (**2IK6A-CW2BE**)	6	Single-Phase 220	50	0.103	38	49	1150	0.6
				60	0.091	40	41	1450	
			Single-Phase 230	50	0.107	45	49	1200	
				60	0.094	40	41	1450	
ZP **2IK6GN-SW2** (**2IK6A-SW2**)	ZP **2IK6GN-SW2B** (**2IK6A-SW2B**)	6	Three-Phase 200	50	0.081	49	49	1200	–
				60	0.072	41	41	1400	
			Three-Phase 220	60	0.076	41	41	1500	
			Three-Phase 230	60	0.079	41	41	1500	

- 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

ZP: These products are impedance protected.

Degree of Protection

Type	Product Name		Degree of Protection
	Pinion Shaft Type	Round Shaft Type	
Lead Wire	**2IK6GN-CW2E** **2IK6GN-SW2**	**2IK6A-CW2E** **2IK6A-SW2**	IP20
Terminal Box	**2IK6GN-CW2BE** **2IK6GN-SW2B**	**2IK6A-CW2BE*** **2IK6A-SW2B***	IP65

*Excluding the installation surface of the round shaft type.

Product Line

Motors RoHS

Type	Product Name	
	Pinion Shaft Type	Round Shaft Type
Lead Wire	**2IK6GN-CW2E**	**2IK6A-CW2E**
	2IK6GN-SW2	**2IK6A-SW2**
Terminal Box	**2IK6GN-CW2BE**	**2IK6A-CW2BE**
	2IK6GN-SW2B	**2IK6A-SW2B**

The following items are included in each product.
Motor, Capacitor*, Capacitor Cap*, Operating Manual
*Single-phase motors only

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 **GN-S** Gearhead	**2GN□S**	**3~180**
		2GN10XS (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, 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.

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Features C-20 / System Configuration C-23 / Product Line C-30 / Specifications C-30
Dimensions C-31 / Connection Diagrams C-29

Permissible Torque When Gearhead is Attached

- A code (**B**) indicating the terminal box type is entered where the box ☐ is located within the motor product name.
  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 3 N·m.

◇50 Hz

Unit = N·m

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
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**
2IK6GN-CW2□E 2IK6GN-SW2□	**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

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
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**
2IK6GN-CW2□E 2IK6GN-SW2□	**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

Motors (Round shaft type) ➜ Page C-16
Gearheads ➜ Page C-16

Permissible Load Inertia: J of Gearhead

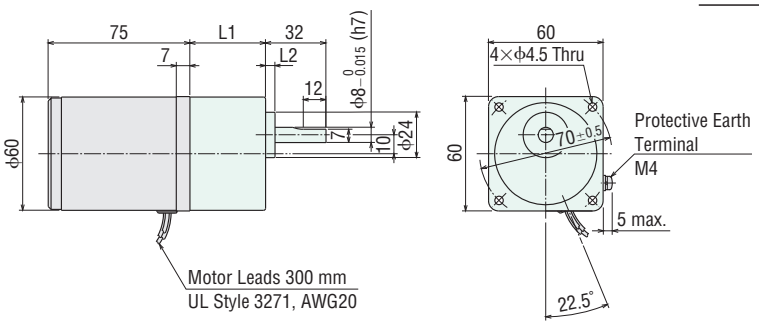
➜ Page C-17

Dimensions (Unit = mm)

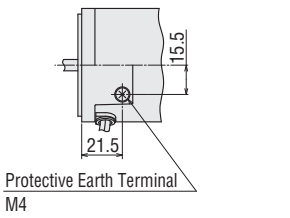
- Mounting screws are included with gearheads. Dimensions for mounting screws ➜ Page C-254
- A number indicating the gear ratio is entered where the box ☐ is located within the product name.

◇Lead Wire Type ①

Mass: Motor 0.7 kg
Gearhead 0.4 kg



Motor Product Name	Gearhead Product Name	Gear Ratio	L1	L2
2IK6GN-CW2E 2IK6GN-SW2	**2GN□S**	**3～18**	30	5
		25～180	40	

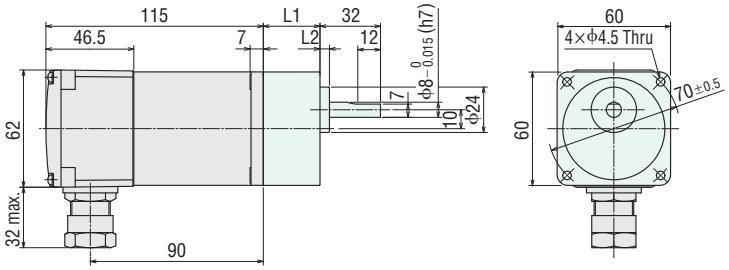


Detail Drawing of Protective Earth Terminal

◇Terminal Box Type ②

Mass: Motor 0.9 kg
Gearhead 0.4 kg

Motor Product Name	Gearhead Product Name	Gear Ratio	L1	L2
2IK6GN-CW2BE **2IK6GN-SW2B**	**2GN□S**	**3～18**	30	5
		25～180	40	

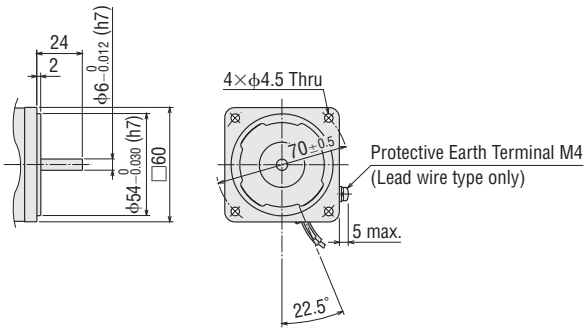


- Applicable cables diameter is ϕ8～ϕ12.
- Details of terminal box ➜ Page C-255

◇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: 0.7 kg (Lead wire type)
0.9 kg (Terminal box type)

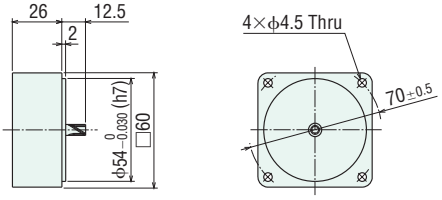


◇Decimal Gearhead

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

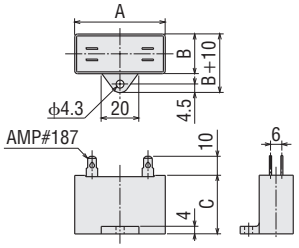
2GN10XS

Mass: 0.2 kg



◇Capacitor

(Included with single-phase motors)



◇Capacitor Dimensions (mm)

Product Name Upper Product Name: Pinion Shaft Type Lower Product Name in ( ): Round Shaft Type		Capacitor Product Name	A	B	C	Mass (g)	Capacitor Cap
Lead Wire Type	Terminal Box Type						
2IK6GN-CW2E (**2IK6A-CW2E**)	**2IK6GN-CW2BE** (**2IK6A-CW2BE**)	CH06BFAUL	31	14.5	23.5	18	Included

Connection Diagrams

➜ Page C-29

Peripheral Equipment

Instantaneous Stop

Brake Pack
➜ Page C-229

Speed Control

Inverters
➜ Page D-136

Accessories

Mounting Brackets
➜ Page C-240

Couplings
➜ Page C-245