



INDUCTION MOTORS

Single-Phase, Three-Phase

40w (1/18.5 HP)

Frame Size 3.54 in.sq.(90mm sq.)



Specifications — Continuous Rating

Model			Output Power	Voltage	Frequency	Current	Starting Torque	Rated Torque	Rated Speed	Capacitor			
Upper Model Name:Pinion Shaft Type	Lower Model Name():Round Shaft Type												
Lead Wire Type	Terminal Box Type	Conduit Box Type	HP	W	V	Hz	A	oz-in	mN·m	oz-in	mN·m	r/min	μF
Dimension ①	Dimension ②	Dimension ③											
5IK40GN-AWU	5IK40GN-AWTU	5IK40GN-FCH											
(5IK40A-AWU)	(5IK40A-AWTU)	(5IK40AA-FCH)											
5IK40GN-CWE	5IK40GN-CWTE	5IK40GN-ECH											
(5IK40A-CWE)	(5IK40A-CWTE)	(5IK40AA-ECH)											
5IK40GN-SW	5IK40GN-SWT	5IK40GN-SH											
(5IK40A-SW)	(5IK40A-SWT)	(5IK40AA-SH)											
5IK40GN-AUL	—	—											
(5IK40A-AULA)	—	—											

- The product contains a built-in thermal protector. When 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.
- The "U" and "E" at the end of the model name indicate that the unit includes a capacitor. These two letters are not listed on the motor nameplate. When the motor is approved under various safety standards, the nameplate is adopted.
- The conduit box type of the motors are not VDE approved.

Gearmotor — Torque Table

The maximum permissible torque with a decimal gearhead with a gear ratio of 10 is 87 lb-in (10N·m).

- Right-Angle gearhead may be connected. See page [A-216] for more information on the right-angle gearheads.

Single-Phase 115V/230V, Three-Phase 230V 60Hz

Unit = Upper values: lb-in / Lower values: N·m

Model	Speed r/min	Gear Ratio																				
		500	416	300	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3	
5IK40GN-AWU 5IK40GN-AWTU 5IK40GN-CWE 5IK40GN-CWTE 5IK40GN-SW 5IK40GN-SWT 5IK40GN-FCH 5IK40GN-ECH 5IK40GN-SH 5IK40GN-AUL	5GN□KA	5.5	6.6	9.1	11	14	16	23	27	33	41	49	59	74	87	87	87	87	87	87	87	
		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	10

Single-Phase 230V/50Hz

Unit = Upper values: lb-in / Lower values: N·m

Model	Speed r/min	Gear Ratio																			
		500	416	300	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3
5IK40GN-CWE 5IK40GN-CWTE 5IK40GN-ECH	5GN□KA	6.3	7.6	11	13	16	19	26	32	38	48	57	68	86	87	87	87	87	87	87	87
		0.73	0.87	1.2	1.5	1.8	2.2	3.0	3.6	4.4	5.5	6.6	7.9	9.9	10	10	10	10	10	10	10

- Gearheads are sold separately.
- Enter the gear ratio in the box (□) within the model number. A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
- The speed is calculated by dividing the motor's synchronous speed (50 Hz: 1500r/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.

■ Dimensions Scale 1/4, Unit = inch (mm)

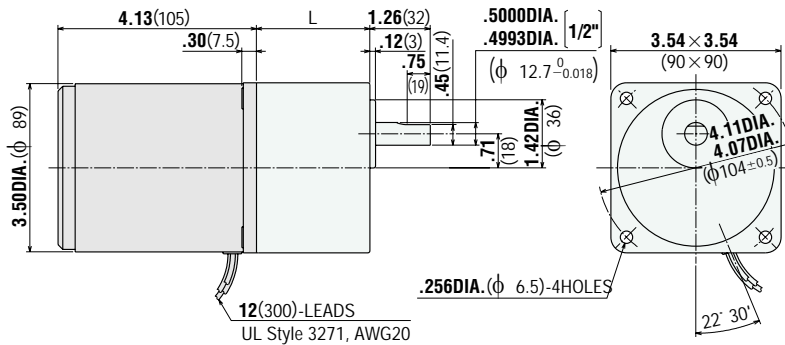
① Motor/Gearhead

51K40GN-AWU
51K40GN-CWE
51K40GN-SW
51K40GN-AUL

Weight (Mass): 5.5 lb.(2.5 kg)

5GN□KA

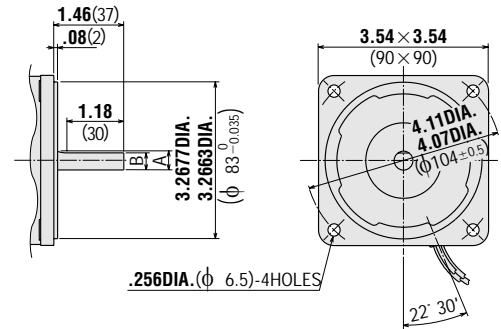
Weight (Mass): 3.3 lb.(1.5 kg)



L=1.65 (42) **5GN3KA~18KA**
 L=2.36 (60) **5GN25KA~180KA**

51K40A-AWU Round Shaft Type
51K40A-CWE
51K40A-SW
51K40A-AULA

Weight (Mass): 5.5 lb.(2.5 kg)



Unit = inch (mm)

Model	Shaft Diameter A	B
51K40A-AWU	.3937DIA. ($\phi 10_{.015}$)	.35(9)
51K40A-CWE	.3931DIA. ($\phi 10_{.015}$)	.35(9)
51K40A-SW	.3750DIA. ($\phi 9.525_{.011}$)	.35(8.825)
51K40A-AULA	.3744DIA. ($\phi 9.525_{.011}$)	.35(8.825)

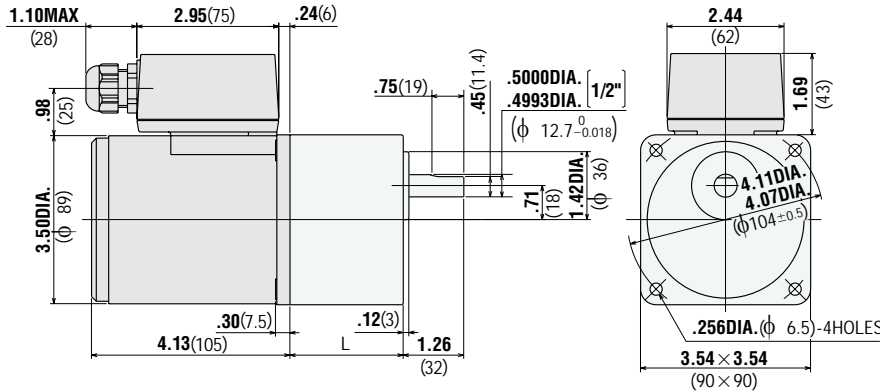
② Motor/Gearhead

51K40GN-AWTU
51K40GN-CWTE
51K40GN-SWT

Weight (Mass): 5.7 lb.(2.6 kg)

5GN□KA

Weight (Mass): 3.3 lb.(1.5 kg)

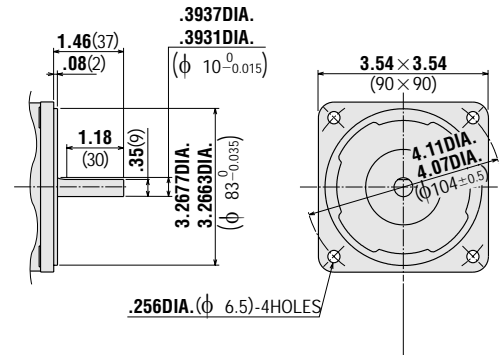


L=1.65 (42) **5GN3KA~18KA**
 L=2.36 (60) **5GN25KA~180KA**

Use cabtyre cable with the diameter of
 .24DIA. ($\phi 6$)~.47DIA. ($\phi 12$).

51K40A-AWTU Round Shaft Type
51K40A-CWTE
51K40A-SWT

Weight (Mass): 5.7 lb.(2.6 kg)



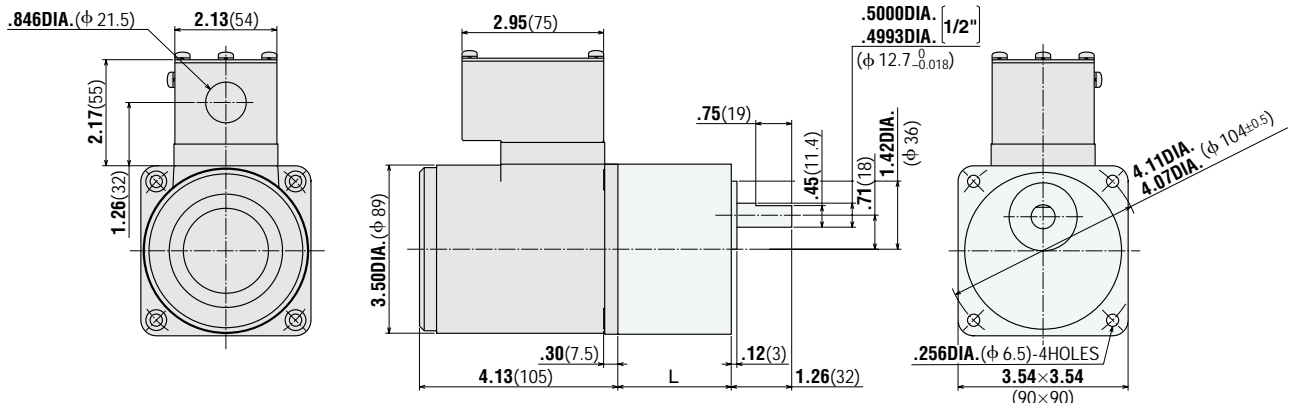
③ Motor/Gearhead

51K40GN-FCH
51K40GN-ECH

Weight (Mass): 6.0 lb.(2.7 kg)

5GN□KA

Weight (Mass): 3.3 lb.(1.5 kg)



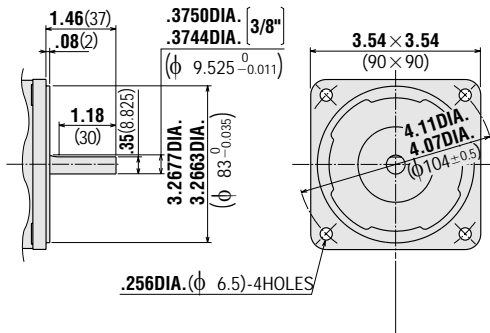
L=1.65 (42) **5GN3KA~18KA**
 L=2.36 (60) **5GN25KA~180KA**

MOTOR LEAD WIRE ×3 UL style 3266, AWG20
 GROUND LEAD WIRE ×1 UL style 3266, AWG18

5IK40AA-FCH Round Shaft Type

5IK40AA-ECH

Weight (Mass): 6.0 lb.(2.7 kg)

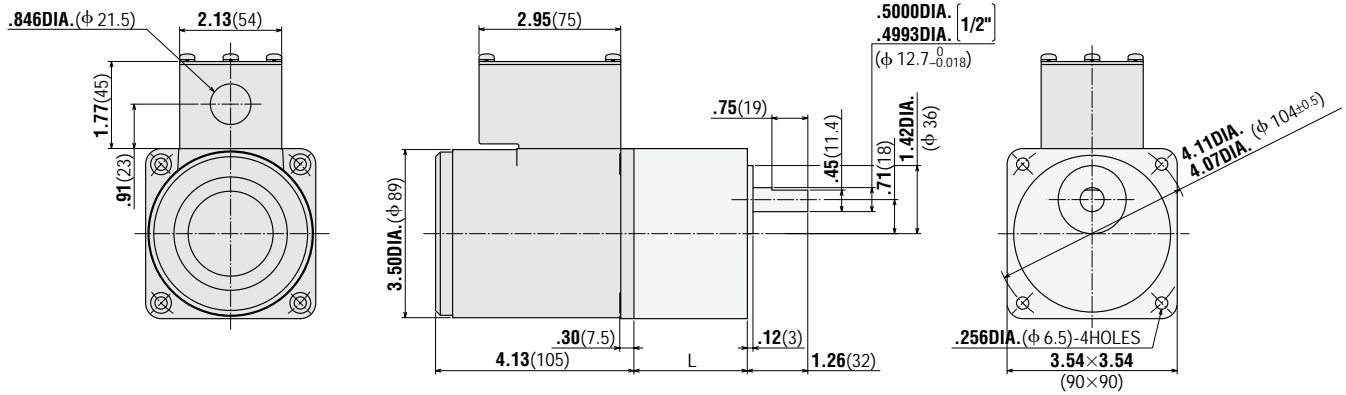


5IK40GN-SH

Weight (Mass): 5.5 lb.(2.5 kg)

5GN□KA

Weight (Mass): 3.31 lb.(1.5 kg)

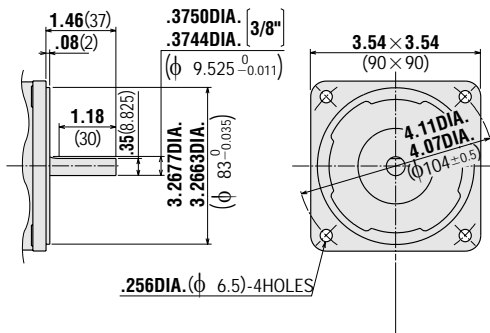


L=1.65 (42) **5GN3KA~18KA**
L=2.36 (60) **5GN25KA~180KA**

MOTOR LEAD WIRE ×3 UL style 3266, AWG20
GROUND LEAD WIRE ×1 UL style 3266, AWG18

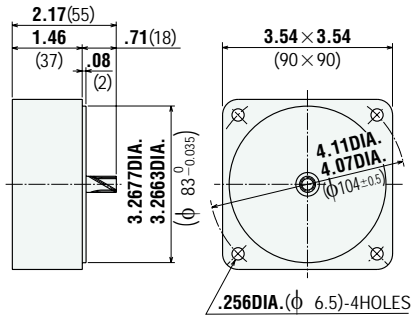
5IK40AA-SH Round Shaft Type

Weight (Mass): 5.5 lb.(2.5 kg)

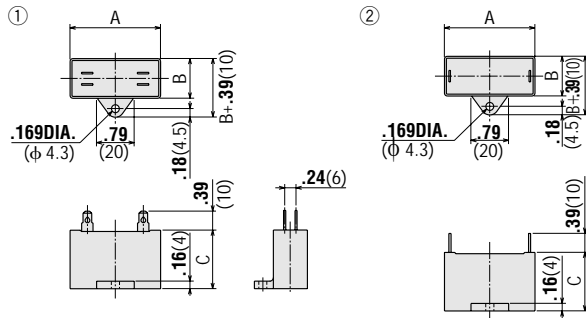


● Decimal Gearhead

5GN10XK Weight: 1.32 lb.(0.6 kg)



● Capacitor (included with the motor)

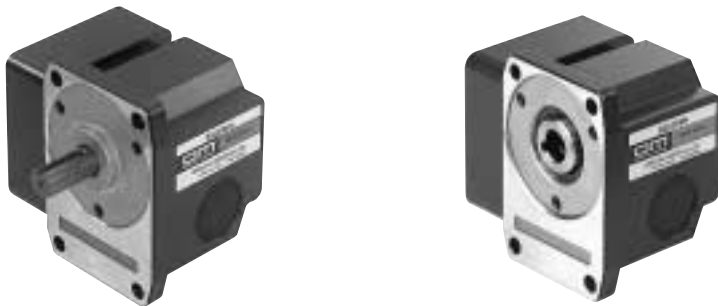


Motor Model	Capacitor Model	Dimensions in. (mm)			Weight (Mass) oz (g)	Dimension No.
		A	B	C		
5IK40GN-AW□U	CH90CFAUL	1.89	0.83	1.22	1.41 (40)	①
5IK40A-AW□U		(48)	(21)	(31)		
5IK40GN-CW□E	CH23BFAUL	1.89	0.83	1.22	1.41 (40)	①
5IK40A-CW□E		(48)	(21)	(31)		
5IK40GN-AUL	CH80UL	1.50	0.83	1.22	1.23 (35)	②
5IK40A-AULA		(38)	(21)	(31)		

If you need to order a capacitor without a motor, add "-C" to the capacitor model number shown. A capacitor cap is always included with a capacitor.

■ Right-Angle Gearheads

The right-angle gearhead provides an output shaft that is at a right angle to the motor's output shaft. See page [A-216] for specifications and other information.



■ Wiring Diagrams

The direction of motor rotation is as viewed from the shaft end of the motor.

Model	Lead Wire Type		
	5IK40GN-AWU 5IK40GN-CWE	5IK40GN-SW	5IK40GN-AUL
Direction			
CW			
CCW	To rotate the motor in a clockwise (CW) direction, flip switch SW to CW. To rotate it in a counterclockwise (CCW) direction, flip switch SW to CCW.	To change the rotation, change any two connections between U, V and W.	

Model	Terminal Box Type		Conduit Box Type	
	5IK40GN-AWTU 5IK40GN-CWTE	5IK40GN-SWT	5IK40GN-FCH 5IK40GN-ECH	5IK40GN-SH
Direction				
CW				
CCW	To rotate the motor in a clockwise (CW) direction, flip switch SW to CW. To rotate it in a counterclockwise (CCW) direction, flip switch SW to CCW.	To change the rotation, change any two connections between U, V and W.	To rotate the motor in a clockwise (CW) direction, flip switch SW to CW. To rotate it in a counterclockwise (CCW) direction, flip switch SW to CCW.	To change the rotation, change any two connections between U, V and W.

Change the direction of motor rotation only after bringing the motor to a stop.

If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction of rotation after some delay.

■ Accessories

● Motor Mounting Brackets

Optional die-cast aluminum mounting brackets are available. They can be used to install motors with or without gearheads. See page [A-266] for the dimensions.

Model name **SOL5UA**



● Flexible Coupling

Optional clamping couplings are available. See page [A-260] for the dimensions.

