

INDUCTION MOTORS

Single-Phase, Three-Phase

60W (1/12.5 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												
UL VDE	5IK60GU-AWU	5IK60GU-AWTU	5IK60GU-FCH											
	(5IK60A-AWU)	(5IK60A-AWTU)	(5IK60A-FCH)											
UL VDE	5IK60GU-CWE	5IK60GU-CWTE	5IK60GU-ECH											
	(5IK60A-CWE)	(5IK60A-CWTE)	(5IK60A-ECH)											
UL VDE	5IK60GU-SW	5IK60GU-SWT	5IK60GU-SH	1/12.5	60	Three-Phase 200	50	0.5	83.3	600	62.5	450	1300	
				Three-Phase 200	60	0.43	69.4	500	52.8	380	1550			
				Three-Phase 220	60	0.45	69.4	500	52.8	380	1600			
				Three-Phase 230	60	0.46	69.4	500	52.8	380	1600			
UL VDE	5IK60GU-AFUL	—	—	Single-Phase 115	60	0.96	41.7	300	52.8	380	1550	12		

- 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 174 lb-in (20N·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																			
		600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
5IK60GU-AWU 5IK60GU-AWTU 5IK60GU-CWE 5IK60GU-CWTE 5IK60GU-FCH 5IK60GU-ECH	5GU□KA	8.5	10	14	17	21	26	32	38	46	58	70	83	116	139	155	174	174	174	174	174
		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	16	18	20	20	20	20	20
		8	9.6	13	16	20	24	30	36	43	54	65	78	109	131	146	174	174	174	174	174
		0.92	1.1	1.5	1.8	2.3	2.8	3.5	4.2	5	6.3	7.5	9	13	15	17	20	20	20	20	20
		5IK60GU-SW 5IK60GU-SWT 5IK60GU-SH 5IK60GU-AFUL	5GU□KA	8	9.6	13	16	20	24	30	36	43	54	65	78	109	131	146	174	174	174

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
5IK60GU-CWE 5IK60GU-CWTE 5IK60GU-ECH	5GU□KA	10	12	17	21	26	31	39	47	56	70	84	101	140	168	174	174	174	174	174	174
		1.2	1.4	2.0	2.4	3.0	3.6	4.5	5.4	6.4	8.1	9.7	12	16	19	20	20	20	20	20	20

- 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)

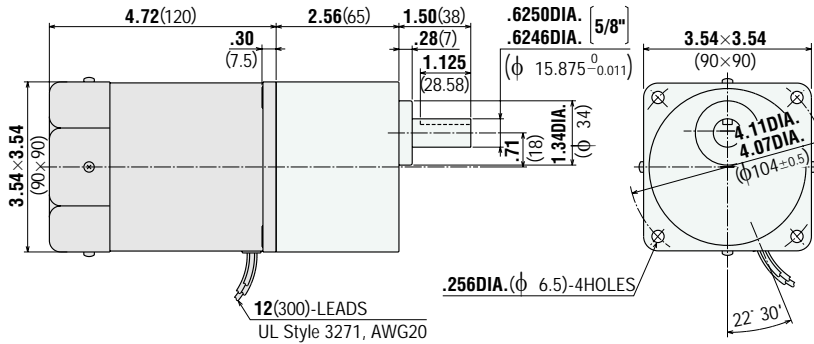
① Motor/Gearhead

5IK60GU-AWU
5IK60GU-CWE
5IK60GU-SW
5IK60GU-AFUL

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

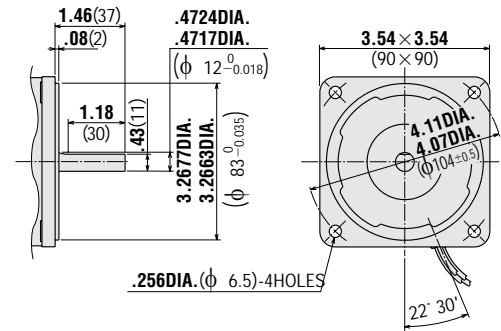
5GU□KA

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



5IK60A-AWU Round Shaft Type
5IK60A-CWE
5IK60A-SW
5IK60A-AFUL

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



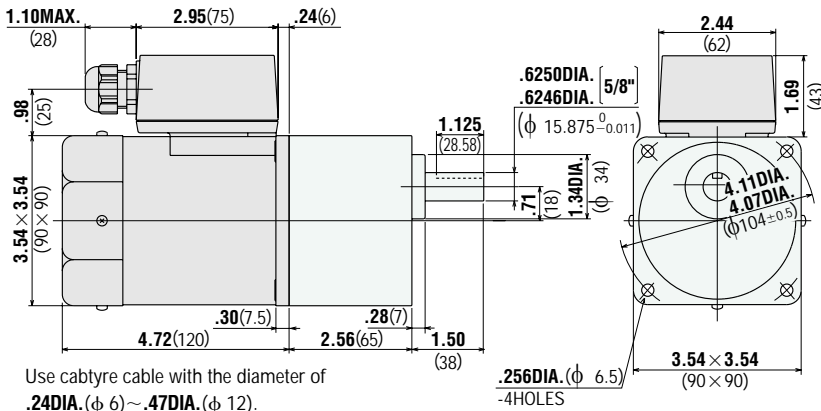
② Motor/Gearhead

5IK60GU-AWTU
5IK60GU-CWTE
5IK60GU-SWT

Weight (Mass): 6.2 lb.(2.8 kg)

5GU□KA

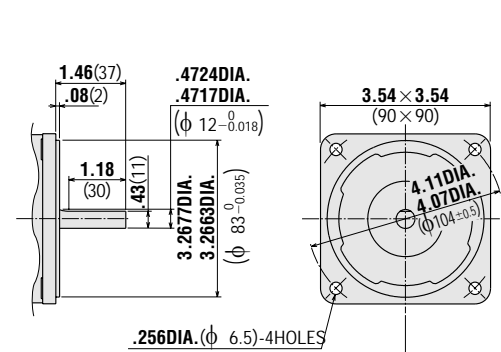
Weight (Mass): 3.3 lb.(1.5 kg)



Use cabtyre cable with the diameter of
.24DIA. (φ 6) ~ **.47DIA.** (φ 12).

5IK60A-AWTU Round Shaft Type
5IK60A-CWTE
5IK60A-SWT

Weight (Mass): 6.2 lb.(2.8 kg)



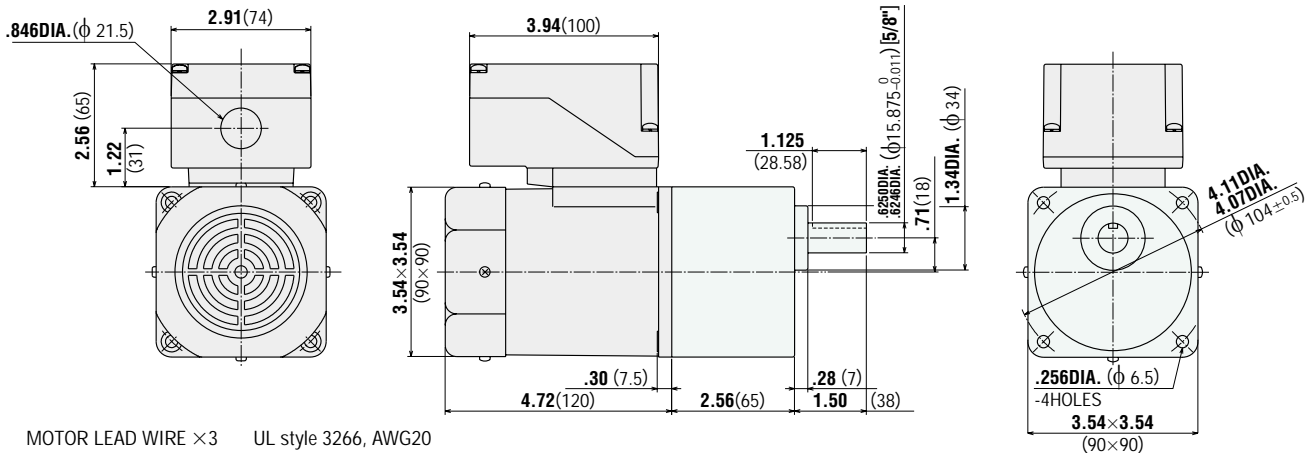
③ Motor/Gearhead

5IK60GU-FCH
5IK60GU-ECH

Weight (Mass): 7.1 lb.(3.2 kg)

5GU□KA

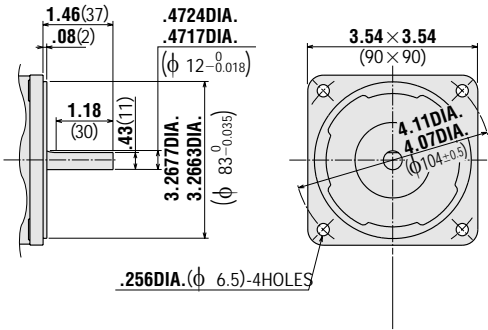
Weight (Mass): 3.3 lb.(1.5 kg)



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

5IK60A-FCH
5IK60A-ECH

Weight (Mass): 7.1 lb.(3.2 kg)

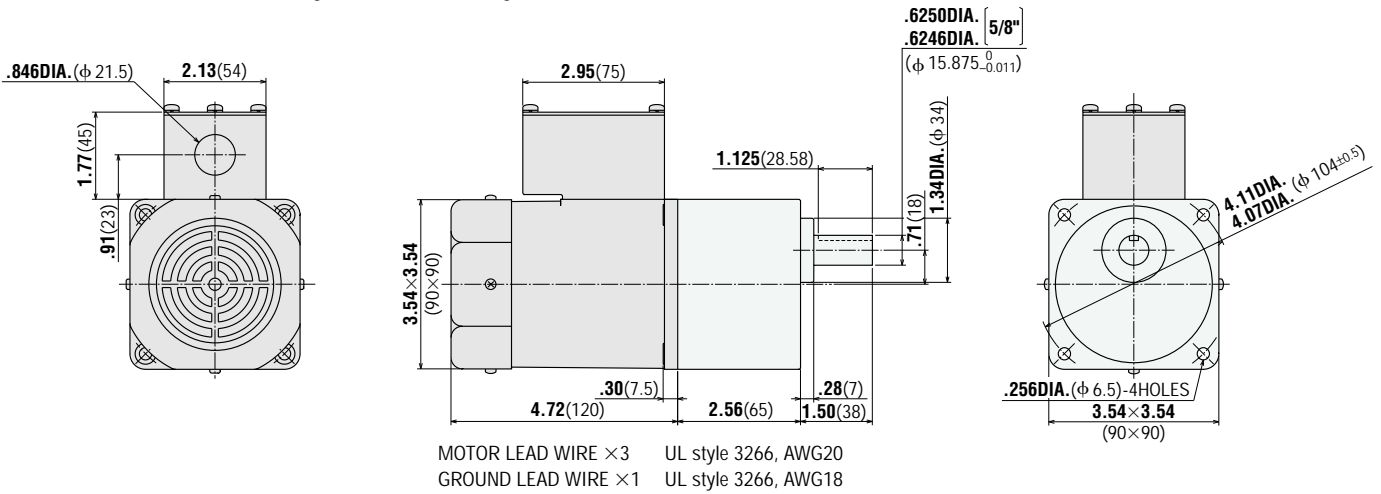


5IK60GU-SH

Weight (Mass): 6.2 lb.(2.8 kg)

5GU□KA

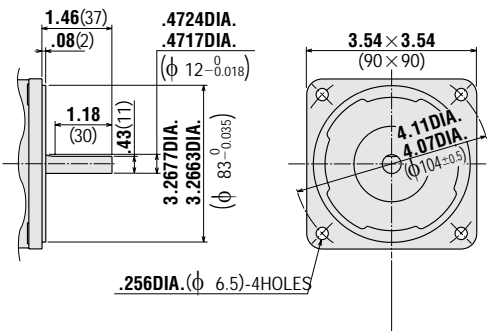
Weight (Mass): 3.3 lb.(1.5 kg)



5IK60A-SH

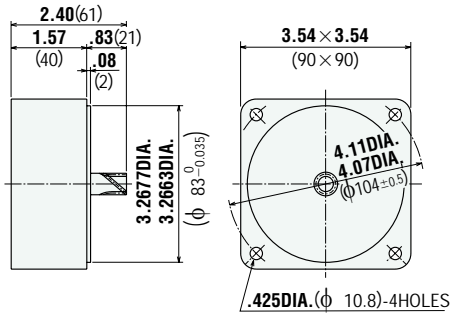
Round Shaft Type

Weight (Mass): 6.2 lb.(2.8 kg)

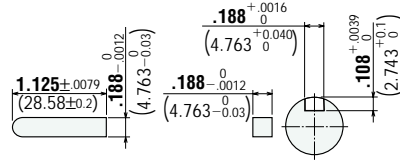


Decimal Gearhead

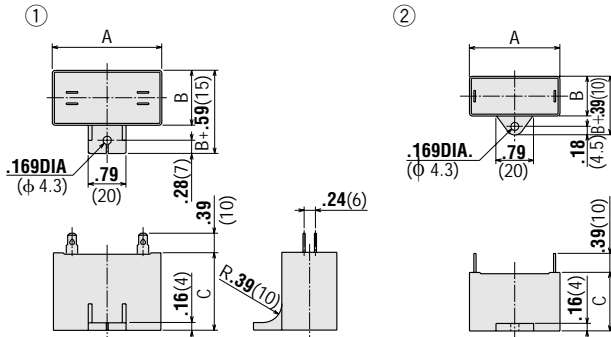
5GU10XKB Weight (Mass): 1.32 lb.(0.6 kg)



• **Key and Key Slot** Scale 1/2
(The key is provided with the gearhead)



Capacitor (included with the motor)

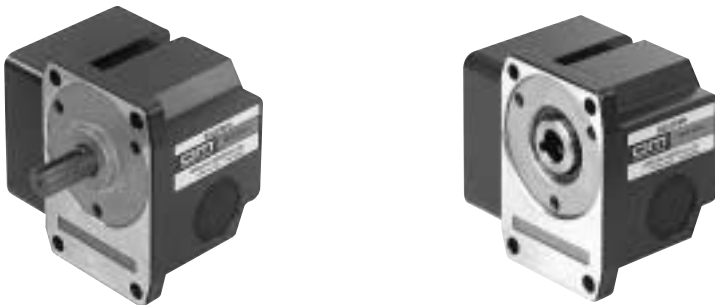


Motor Model	Capacitor Model	Dimensions in. (mm)			Weight oz (g)	Dimension No.
		A	B	C		
5IK60GU-AW □U	CH180CFAUL	2.28 (58)	0.93 (23.5)	1.46 (37)	2.47 (70)	①
5IK60A-AW □U						
5IK60GU-CW □E	CH40BFAUL	2.28 (58)	0.93 (23.5)	1.46 (37)	2.47 (70)	①
5IK60A-CW □E						
5IK60GU-AFUL	CH120CUL	2.28 (58)	0.83 (21)	1.22 (31)	1.76 (50)	②
5IK60A-AFUL						

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.

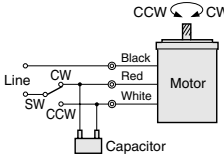
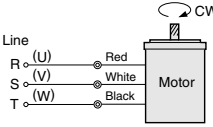
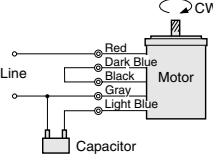
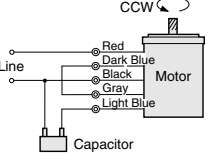
Right-Angle Gearheads

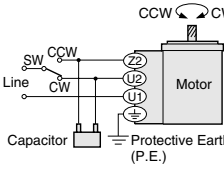
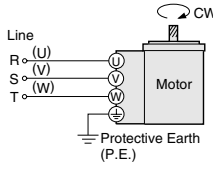
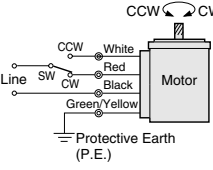
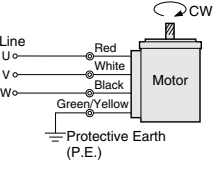
The right-angle gearhead provides an output shaft that is at a right angle to the motor's output shaft. See page [A-216] for specifications and other information.



■ Wiring Diagrams

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

Model Direction	Lead Wire Type		
	5IK60GU-AWU 5IK60GU-CWE	5IK60GU-SW	5IK60GU-AFUL
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 Direction	Terminal Box Type		Conduit Box Type	
	5IK60GU-AWTU 5IK60GU-CWTE	5IK60GU-SWT	5IK60GU-FCH 5IK60GU-ECH	5IK60GU-SH
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 **SOLSUA**



● Flexible Coupling

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

