



[Characteristic of Electromagnetic Brake Motor]

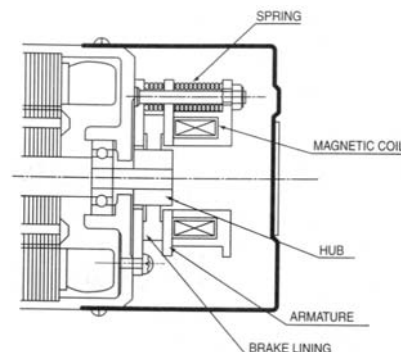
1. Overview of Electromagnetic Brake Motor

- The electromagnetic brake of AC non-excitation run type is mounted at the back of the motor to enable the motor to stop at the same time when the power is turned off, and the load is maintained as same as before.
- The brake of the single-phase motor is connected with the reversible motor, and the brake of the three-phase motor with the induction motor.
- When you use a motor as a source of dynamic force, if you want to stop the motor in a short time and maintain the load at the position where it stops, the induction motor can not stop instantaneously when the power is turned off. Instead, it runs further by 30~40 rotations. On the other hand, the reversible motor makes 5~6 more rotations, (Provided to no-load).
- If the motor requires to be stopped instantaneously, it can use the brake pack. But the brake pack is an electronic brake circuit that can let the motor stop instantaneously but it can not hold torque. (The overrun is less than one rotation on no-load.)
- The electromagnetic brake motor is employed if the load should be maintained.
- The electromagnetic brake of AC non-excitation run type is mounted at the back of the motor for operation.
- The electromagnetic motor makes 1~4 times of overrun rotation at the time the power is turned off if the electromagnetic brake motor unit is loaded.
- The frequent instantaneous directional changes are possible from normal to reverse, and vice versa. With a simple control, it is possible to make 6 stops per minute. (However, more than 3 seconds of stoppage is required.)
- The motor and the brake can use the same power source. The rectifying circuit is embedded in the brake and so the brake can use the same AC source as the motor uses.

2. Electromagnetic Brake of Non-excitation Run Type

(1) Structure and Operation Principle

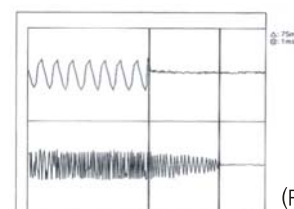
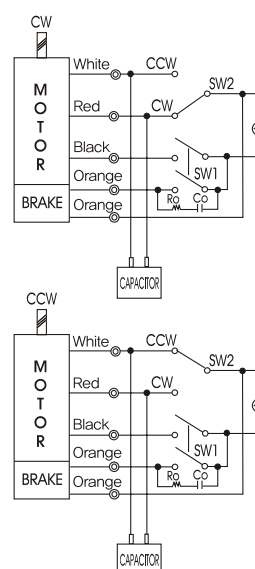
- (Fig. 1) in the right side shows a structural diagram of the electromagnetic brake motor. Our electromagnetic brake motor is a non-excitation run type. When the voltage is applied to the coil, the armature that is suppressed by the spring is pulled to thrust the spring to make a gap between the armature and the brake to release the braking force and then, the motor shaft stops.



(Fig. 1) Structural Diagram of the Electromagnetic Brake

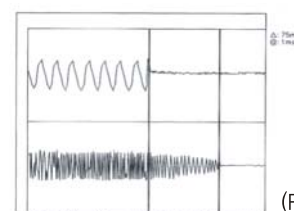
(3) Braking Time Difference by Connection Method

- The connection can be made as shown in (Fig. 2). However, the method shown in (Fig. 3) is also possible if a simpler connection method is sought for. In case of (Fig. 3), the braking time takes longer roughly by 50msec than that of (Fig. 2), resulting in the increase of overrun. This is because the braking action lags about 50msec by the magnet even after the brake's excitation is vanished, because the magnetic energy of the motor can act on the excitation winding of the electronic brakes's magnet when the braking takes place.



(Fig. 2)

(Stop time is about 75msec, SLIP is about 1.2 revolutions, Model K8RG25NU-D is used for measurement.)



(Fig. 3)

(Stop time is about 124.50msec, SLIP is about 2.1 revolutions, Model K8RG25NU-B is used for measurement.)

(2) Characteristic of Electromagnetic Brake

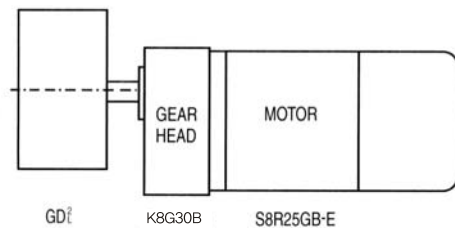
- This is the electromagnetic brake of AC non-excitation run type and can be connected directly to the motor. When the power source is turned off, the motor stops instantaneously and the load is maintained. The retention force is 2 kgf · cm ~ 10 kgf · cm. This type of brake is best suited if a safer brake is required when the power is turned off, because the retention force is maintained when the power turns off.

BRAKE Specification

Voltage	Size (mm)	Output (w)	Frequency (Hz)	Ampere (A)	Input (W)	Brake (kg·cm)	Torque (N·m)
Single-phase 110V/220V	60	6	50/60	0.031	3.1	2.0	0.20
	70	15					
Single-phase 110V/220V ↓ Three-phase 220V	80	25	50/60	0.100	10.0	10	1.00
		40					
	90	60					
		90					



3. Operating Time and Braking Characteristics



(1) Take K8RG25NC-B as an example and let it be combined with K8G30B to drive the inertia body ($GDL^2 = 1000 \text{ kgf} \cdot \text{cm}^2$). To calculate the operating time, braking time, and overrun under the power source frequency of 60Hz, first convert the load's inertia moment to the motor shaft as follows.

$$GDM^2 = \frac{GDL^2}{i^2} [\text{Kgf} \cdot \text{cm}^2] = \frac{1000}{30^2} = 1.1 [\text{kgf} \cdot \text{cm}^2]$$

GDL^2 : Fly wheel effect of load $[\text{kgf} \cdot \text{cm}^2]$

GDM^2 : Fly wheel effect at motor shaft $\text{kgf} \cdot \text{cm}^2$

i : Ratio of gearhead

The inertia moment expressed in SI unit can be calculated by the following expression.

$$I = \frac{GD^2}{4g} [\text{Kgf} \cdot \text{cm}^2]$$

g : $9.80665 [\text{m/s}^2]$

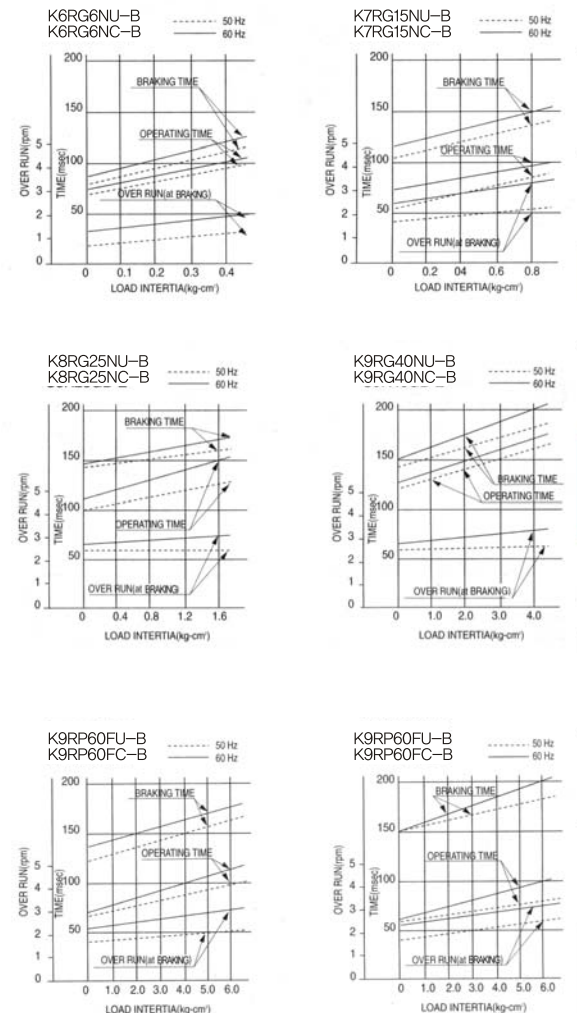
(2) OVER RUN

As shown in (Fig. 5), the overrun of the motor shaft is $NM \div 2.5$ revolutions. Hence, the gearhead's output shaft has the overrun as follows.

$$NG = \frac{NM}{1} = \frac{2.5}{30} = 0.08 \text{ revolution } (28.8^\circ)$$

(3) Operating Time and Braking Time

- As shown in (Fig. 5), the operating time $t1 \div 130[\text{msec}]$, and the braking time $t2 \div 170[\text{msec}]$.
- The operating time of the brake motor is a total sum of the motor's operating time and the electronic brake's open time. Thus, if the electronic brake is left open in advance, the motor can be started quickly.
- It is advised that the brake should be open at least 10msec before the motor starts operating.



(Fig. 5) Operating Time and Braking Characteristics

GENERAL SPECIFICATION OF INDUCTION MOTORS

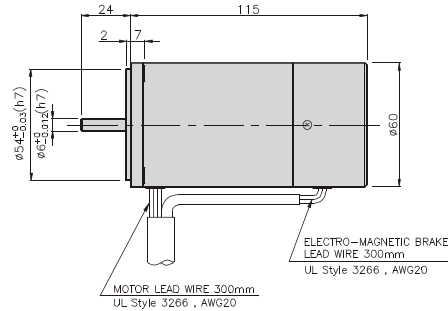
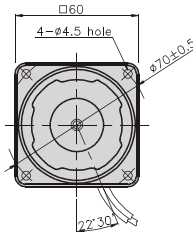
Item	Specification
Insulation Resistance	100Ω or more when 500V megger is applied between the coil of the motor and the motor case after rated motor operation under normal ambient temperature and humidity
Dielectric Strength	Sufficient to withstand 1500V at 50/60Hz applied between the coil of the motor and the motor case after rated motor operation under normal ambient temperature and humidity for 1 min.
Temperature Rise	class A (65°C) or class E (75°C) or less increase measured by thermometer after rated operation
Insulation Class	Class E(120°C), UL approval motor class A (105°C)
Overheat Protection Device	Built-in thermal protector (automatic return type) : Open 130°C±5°C Close 82°C±15°C
Ambient Temperature	-10°C~40°C
Ambient Humidity	85% maximum (non condensing)

BRAKE MOTOR

6W

□ 60mm

K6RS6N□-B



SPECIFICATIONS

6W 30 minutes rating, four poles

Model		Duty	Voltage (V)	Frequency (Hz)	Current (A)	Start T. (N*m/Kgf*cm)	Rated T. (N*m/Kgf*cm)	Speed (rpm)	Condenser (μF)	Friction T. (N*m/(Kg*cm))
K6R□6NJ-B	single-phase	30 minutes	100	50	0,25	0,035/0,35	0,049/0,49	1200	3	0,2/2
				60	0,23		0,04/0,4	1500		
K6R□6NU-B			110	60	0,2	0,045/0,45	0,04/0,4	1500	2,5	0,2/2
			115		0,2					
K6R□6NL-B			200	50	0,12	0,055/0,55	0,049/0,49	1200	1	0,2/2
				60	0,13		0,04/0,4	1500		
K6R□6NC-B			220	50	0,12	0,045/0,45	0,047/0,47	1250	0,8	0,2/2
				60	0,12		0,04/0,4	1500		
			230	50	0,15	0,055/0,55	0,047/0,47	1250		
				60	0,13	0,06/0,6	0,04/0,4	1500		
K6R□6ND-B			240	50	0,12	0,048/0,48	0,047/0,47	1250	0,6	0,2/2

* □ : SHAFT SHAPE (S : STRAIGHT, G : PINION)

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12,5	10	8,3	7,5	6
Motor/ Gearhead	Ratio	3	3,6	5	6	7,5	9	10	12,5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
K6R□6N□-B K6G□B(C)		0,11	0,14	0,19	0,23	0,29	0,34	0,38	0,48	0,57	0,69	0,69	0,86	1,03	1,23	1,37	1,54	1,85	2,31	2,78	3	3	3	3	3	3
		1,1	1,4	1,9	2,3	2,9	3,4	3,8	4,8	5,7	6,9	6,9	8,6	10,3	12,3	13,7	15,4	18,5	23,1	27,8	30	30	30	30	30	30

● 60Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9	7,2
Motor/ Gearhead	Ratio	3	3,6	5	6	7,5	9	10	12,5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
K6R□6N□-B K6G□B(C)		0,10	0,12	0,16	0,19	0,24	0,29	0,32	0,41	0,49	0,58	0,58	0,73	0,87	1,05	1,17	1,31	1,57	1,97	2,36	2,62	3	3	3	3	3
		1,0	1,2	1,6	1,9	2,4	2,9	3,2	4,1	4,9	5,8	5,8	7,3	8,7	10,5	11,7	13,1	15,7	19,7	23,6	26,2	30	30	30	30	30

* Gearhead and decimal gearhead are sold separately.

* The code in □ of gearhead model is for gear ratio.

* ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.

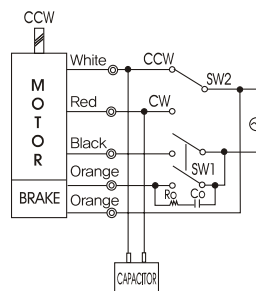
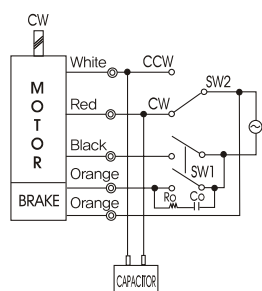
* If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 3N · m/30kgfcm.

* RPM is based on motor's synchronous rpm (50HZ:1500rpm, 60HZ:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

GEARHEADS

CONNECTION DIAGRAMS

Connect Cr circuit for absorbing surge voltage as connection diagram to protect contact point.
 $R_o = 5 - 200\Omega$
 $C_o = 0.1 \sim 0.2\mu F$ 200WV(400WV)



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

DIMENSIONS

K6G□B(C)

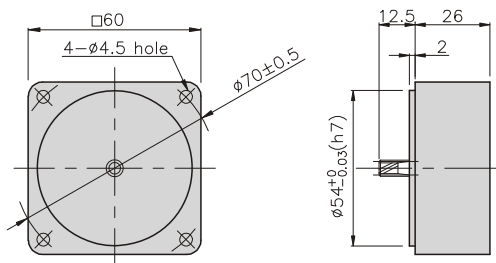


K6RG6N□-B + K6G□B(C)



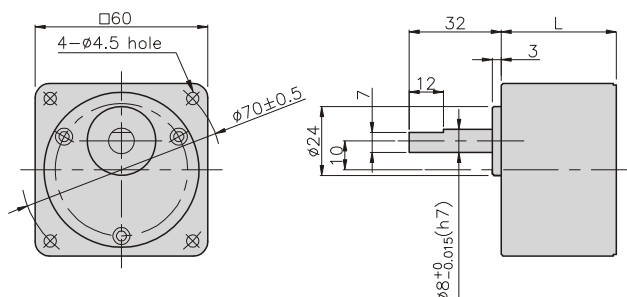
DECIMAL GEARHEAD

K6G10BX



GEARHEAD

K6G□B(C)



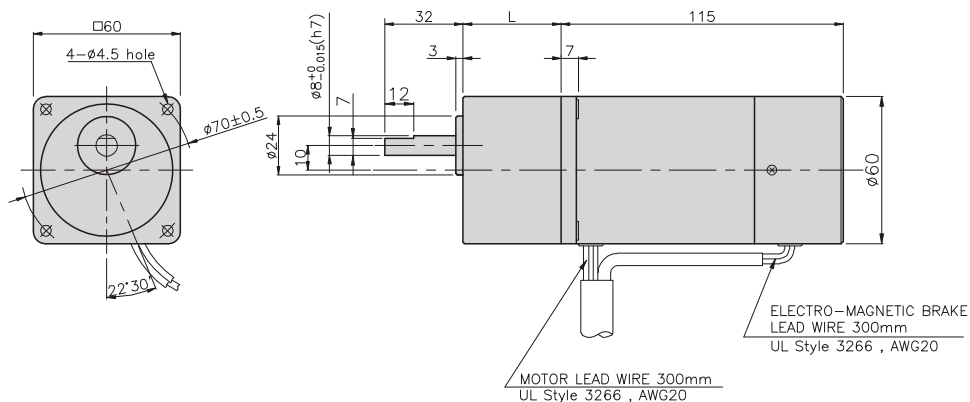
DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	30	K6G3~18B(C)	M4 P0.7 X 50
02	40	K6G20~250B(C)	M4 P0.7 X 60
03	26	K6G10BX	M4 P0.7 X 85

WEIGHT

PART		WEIGHT(kg)
MOTOR		0.93
DECIMAL GEAR HEAD		0.22
GEAR HEAD	K6G3~18B(C)	0.26
	K6G30~40B(C)	0.33
	K6G50~250B(C)	0.36

K6RG6N□-B + K6G□B(C)

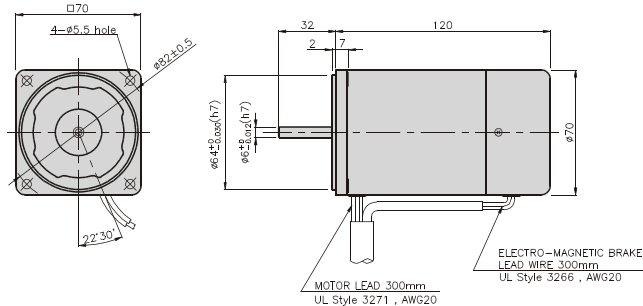


BRAKE MOTOR

15W

□70mm

K7RS15N□-B



SPECIFICATIONS

15W 30 minutes rating, four poles

Model		Duty	Voltage (V)	Frequency (Hz)	Current (A)	Start T. (N*m/Kgf*cm)	Rated T. (N*m/Kgf*cm)	Speed (rpm)	Condenser (μF)	Friction T. (N*m/Kgf*cm)
K7R□15NJ-B	single-phase	30 minutes	100	50	0.46	0.115/1.15	0.12/1.2	1250	7	0.2/2
				60	0.48		0.1/1	1500		
K7R□15NU-B			110	60	0.47	0.12/1.2	0.1/1	1500	6	0.2/2
					0.49	0.125/1.25				
K7R□15NL-B			200	50	0.23	0.115/1.15	0.122/1.22	1250	2	0.2/2
				60	0.28		0.1/1	1500		
K7R□15NC-B			220	50	0.21	0.115/1.15	0.12/1.2	1250	1.5	0.2/2
				60	0.24		0.1/1	1500		
			230	50	0.25	0.125/1.25	0.12/1.2	1250		
				60	0.24		0.1/1	1500		
K7R□15ND-B			240	50	0.25	0.13/1.3	0.12/1.2	1250	1.5	0.2/2

* □ : SHAFT SHAPE (S : STRAIGHT, G : PINION)

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K7R□15N□-B K7G□B(C)		0.29	0.35	0.49	0.58	0.73	0.87	0.97	1.22	1.46	1.75	1.75	2.19	2.62	3.15	3.50	3.94	4.72	5	5	5	5	5	5	5
		2.9	3.5	4.9	5.8	7.3	8.7	9.7	12.2	14.6	17.5	17.5	21.9	26.2	31.5	35.0	39.4	47.2	50	50	50	50	50	50	50

● 60Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K7R□15N□-B K7G□B(C)		0.24	0.29	0.41	0.49	0.61	0.73	0.81	1.01	1.22	1.46	1.46	1.82	2.19	2.62	2.92	3.28	3.94	4.92	5	5	5	5	5	5
		2.4	2.9	4.1	4.9	6.1	7.3	8.1	10.1	12.2	14.6	14.6	18.2	21.9	26.2	29.2	32.8	39.4	49.2	50	50	50	50	50	50

* Gearhead and decimal gearhead are sold separately.

* The code in □ of gearhead model is for gear ratio.

* ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor, Others indicate rotation in the opposite direction.

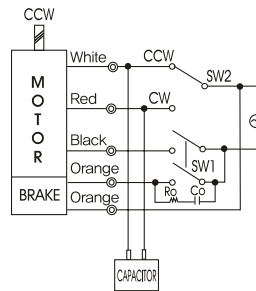
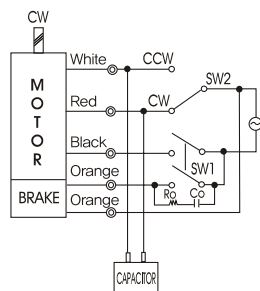
* If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 5N · m/50kgfcm.

* RPM is based on motor's synchronous rpm (50Hz:1500rpm, 60Hz:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

GEARHEADS

CONNECTION DIAGRAMS

Connect Cr circuit for absorbing surge voltage as connection diagram to protect contact point.
 $R_o = 5 - 200\Omega$
 $C_o = 0.1 \sim 0.2\mu F$ 200WV(400WV)



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

DIMENSIONS

K7G□B(C)

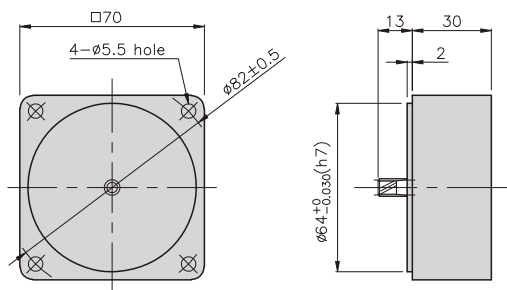


K7RG15N□-B + K7G□B(C)



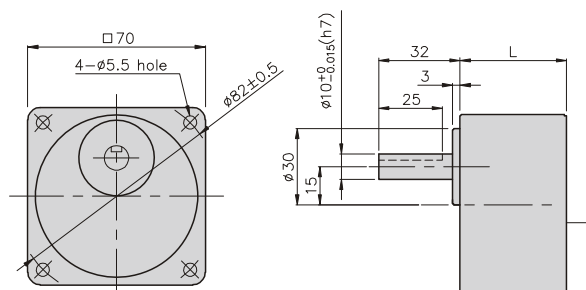
DECIMAL GEARHEAD

K7G10BX



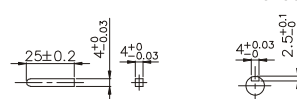
GEARHEAD

K7G□B(C)



• KEY

• KEY GROOVE



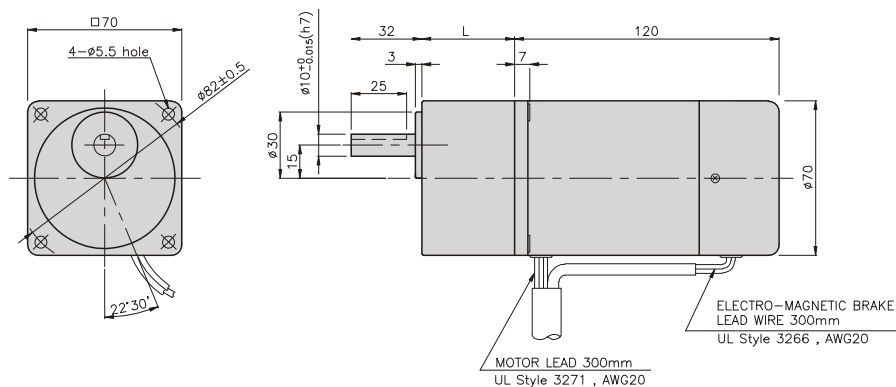
DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	32	K7G3~18B(C)	M4 P0.8 X 50
02	42	K7G20~200B(C)	M4 P0.8 X 65
03	30	K7G10BX	M4 P0.8 X 90

WEIGHT

PART	WEIGHT(kg)
MOTOR	1.30
DECIMAL GEAR HEAD	0.32
GEAR HEAD	
K7G3~18B(C)	0.38
K7G20~40B(C)	0.46
K7G50~200B(C)	0.51

K7RG15N□-B + K7G□B(C)

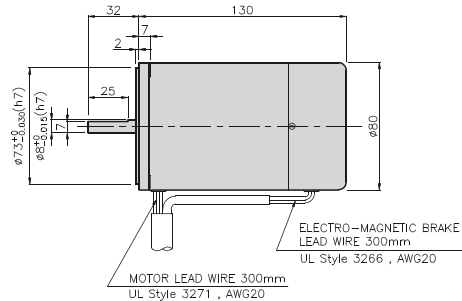
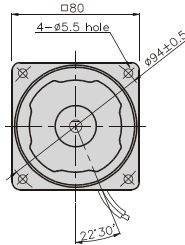


BRAKE MOTOR

25W

□80mm

K8□S25N□-B



SPECIFICATIONS

25W single-phase : 30 minutes rating, three-phase : continuous rating, four poles

Model	Duty	Voltage (V)	Frequency (Hz)	Current (A)	Start T. (N*m/Kgf*cm)	Rated T. (N*m/Kgf*cm)	Speed (rpm)	Condenser (μF)	Friction T. (N*m/Kgf*cm)
K8R□25NJ-B	single-phase	100	50	0.65	0.15/1.5	0.195/1.95	1250	10	0.4/4
K8R□25NU-B			60	0.74		0.165/1.65	1500		
K8R□25NL-B		110	60	0.51	0.13/1.3	0.165/1.65	1500	6	0.4/4
K8R□25NC-B				0.54					
K8R□25ND-B		200	50	0.33	0.16/1.6	0.195/1.95	1250	2.5	0.4/4
K8R□25NH-B			60	0.37		0.16/1.6	1500		
K8R□25NI-B		220	50	0.29	0.15/1.5	0.195/1.95	1250	2	0.4/4
K8R□25NJ-B			60	0.34		0.165/1.65	1500		
K8R□25NK-B		230	50	0.35	0.165/1.65	0.195/1.95	1250	2	0.4/4
K8R□25NL-B			60	0.34		0.165/1.65	1500		
K8R□25NN-B		240	50	0.32	0.15/1.5	0.19/1.9	1300	1.5	0.4/4
K8R□25NN-B			60	0.32		0.19/1.9	1300		
K8I□25NT-B	three-phase	200	50	0.27	0.5/5	0.19/1.9	1300	-	0.4/4
K8I□25NH-B			60	0.24	0.4/4	0.16/1.6	1550		
K8I□25NI-B		220	50	0.28	0.6/6	0.185/1.85	1350	-	0.4/4
K8I□25NJ-B			60	0.24	0.48/4.8	0.155/1.55	1600		
K8I□25NK-B		230	50	0.29	0.65/6.5	0.185/1.85	1350	-	0.4/4
K8I□25NL-B			60	0.25	0.52/5.2	0.155/1.55	1600		
K8I□25NN-B		380	50	0.17	0.6/6	0.19/1.9	1300	-	0.4/4
K8I□25NH-B			60	0.14	0.48/4.8	0.155/1.55	1600		
K8I□25NI-B		400	50	0.17	0.73/7.3	0.19/1.9	1300	-	0.4/4
K8I□25NJ-B			60	0.15	0.6/6	0.155/1.55	1600		
K8I□25NK-B		415	50	0.13	0.55/5.5	0.19/1.9	1300	-	0.4/4
K8I□25NL-B			60	0.11	0.4/4	0.155/1.55	1600		
K8I□25NN-B		440	50	0.14	0.63/6.3	0.19/1.9	1300	-	0.4/4
K8I□25NH-B			60	0.12	0.5/5	0.155/1.55	1600		

* □ : SHAFT SHAPE (S : STRAIGHT, G : PINION)

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	500	46	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5	6
Motor/Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
K8□G25N□-B		0.45	0.54	0.75	0.90	1.12	1.35	1.50	1.87	2.25	2.70	2.70	3.37	4.05	4.86	5.39	6.07	7.28	8	8	8	8	8	8	8	8
K8G□B(C)		4.5	5.4	7.5	9.0	11.2	13.5	15.0	18.7	22.5	27.0	27.0	33.7	40.5	48.6	53.9	60.7	72.8	80	80	80	80	80	80	80	80

● 60Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9	7.2
Motor/Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
K8□G25N□-B		0.38	0.45	0.63	0.75	0.94	1.13	1.26	1.57	1.88	2.26	2.26	2.82	3.39	4.07	4.52	5.08	6.10	7.63	8	8	8	8	8	8	8
K8G□B(C)		3.8	4.5	6.3	7.5	9.4	11.3	12.6	15.7	18.8	22.6	22.6	28.2	33.9	40.7	45.2	50.8	61.0	76.3	80	80	80	80	80	80	80

* Gearhead and decimal gearhead are sold separately.

* The code in □ of gearhead model is for gear ratio.

* color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.

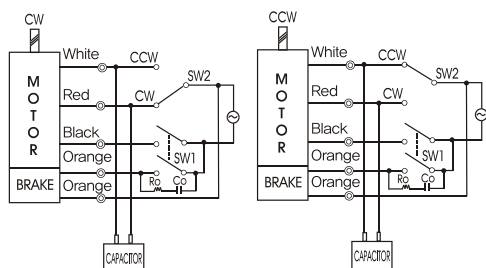
* If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 8N · m/80kgfcm. But, if you install 1/25~1/40 gearhead, the permissible torque is 6N · m/60kgfcm.

* RPM is based on motor's synchronous rpm (50HZ:1500rpm, 60HZ:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

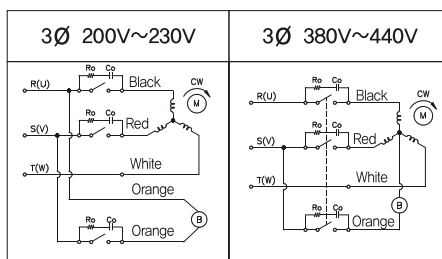
GEARHEADS

CONNECTION DIAGRAMS

single phase motor



three phase motor



connecting two leadwires of U,V,W in turns

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

Connect Cr circuit for absorbing surge voltage as connection diagram to protect contact point.
 $R_o = 5 - 200\Omega$
 $C_o = 0.1 \sim 0.2\mu F$ 200WV(400WV)

DIMENSIONS

K8G□B(C)

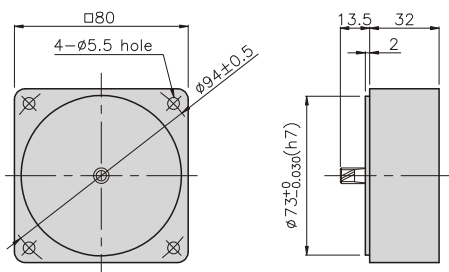


K8□G25N□-B + K8G□B(C)



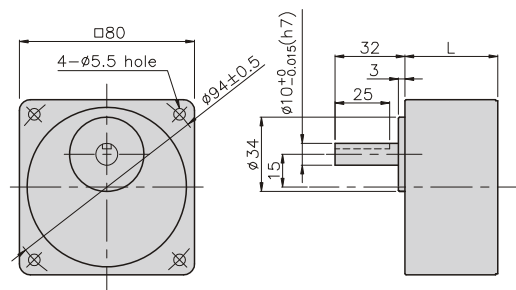
DECIMAL GEARHEAD

K8G10BX



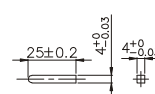
GEARHEAD

K8G□B(C)



• KEY

• KEY GROOVE



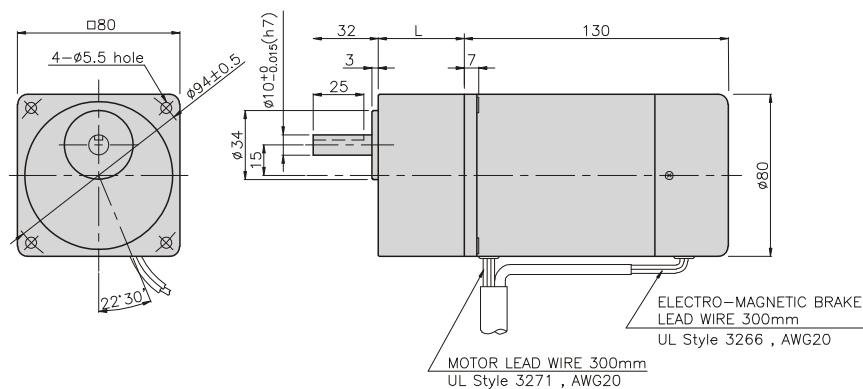
DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	32	K8G3~18B(C)	M4 P0.8 X 50
02	42.5	K8G20~250B(C)	M4 P0.8 X 65
03	32	K8G10BX	M4 P0.8 X 95

WEIGHT

PART	WEIGHT(kg)
MOTOR	1.84
DECIMAL GEAR HEAD	0.46
GEAR HEAD	
K8G3~18B(C)	0.51
K8G20~40B(C)	0.64
K8G50~250B(C)	0.70

K8□G25N□-B + K8G□B(C)

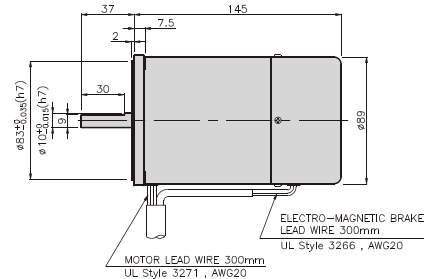
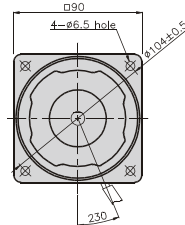


BRAKE MOTOR

40W

□90mm

K9□S40N□-B



SPECIFICATIONS

40W single-phase : 30 minutes rating, three-phase : continuous rating, four poles

Model		Duty	Voltage (V)	Frequency (Hz)	Current (A)	Start T. (N* $\frac{m}{cm}$ / Kg $\frac{f}{cm}$)	Rated T. (N* $\frac{m}{cm}$ / Kg $\frac{f}{cm}$)	Speed (rpm)	Condenser (μ F)	Friction T. (N* $\frac{m}{cm}$ / (Kg $\frac{f}{cm}$))
K9R□40NJ-B	single-phase	30 minutes	100	50	1	0,3/3	0,315/3,15	1250	16	1/10
				60	1.13	0,33/3,3	0,255/2,55	1550		
K9R□40NU-B			110	60	0,8	0,2/2	0,26/2,6	1500	10	1/10
					115	0,83				
K9R□40NL-B			200	50	0,45	0,3/3	0,315/3,15	1250	4	1/10
				60	0,57		0,26/2,6	1500		
K9R□40NC-B			220	50	0,46	0,3/3	0,315/3,15	1250	3,5	1/10
				60	0,55	0,32/3,2	0,26/2,6	1500		
				230	50	0,55	0,4/4	0,315/3,15		
60			0,58		0,36/3,6	0,26/2,6	1500			
K9R□40ND-B	240	50	0,41	0,34/3,4	0,3/3	1300	3	1/10		
K9I□40NT-B	three-phase	continuous	200	50	0,39	1/10	0,3/3	1300	-	1/10
				60	0,32	0,78/7,8	0,245/2,45	1600		
K9I□40NH-B			220	50	0,33	0,95/9,5	0,29/2,9	1350	-	1/10
				60	0,31	0,78/7,8	0,245/2,45	1600		
			230	50	0,41	1/10	0,29/2,9	1350		
60				0,32	0,83/8,3	0,245/2,45	1600			
K9I□40NM-B			380	50	0,18	1/10	0,29/2,9	1350	-	1/10
				60		0,78/7,8	0,245/2,45	1600		
K9I□40NV-B			400	50	0,18	1,15/11,5	0,29/2,9	1350	-	1/10
				60	0,19	0,88/8,8	0,245/2,45	1600		
K9I□40NQ-B			415	50	0,16	0,95/9,5	0,29/2,9	1350	-	1/10
				60	0,14	0,72/7,2	0,245/2,45	1600		
K9I□40NZ-B			440	50	0,19	1/10	0,29/2,9	1350	-	1/10
				60	0,16	0,79/7,9	0,245/2,45	1600		

* □ : SHAFT SHAPE (S : STRAIGHT, G : PINION)

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N · m / below : kg·cm

Model	Speed(rpm)	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9□G40N□-B K9G□B(C)		0.70	0.85	1.17	1.41	1.76	2.11	2.35	2.94	3.52	4.23	4.23	5.29	6.34	7.61	8.46	10	10	10	10	10	10	10	10	10
		7.0	8.5	11.7	14.1	17.6	21.1	23.5	29.4	35.2	42.3	42.3	52.9	63.4	76.1	84.6	100	100	100	100	100	100	100	100	100

● 60Hz

unit = above : N · m / below : kg·cm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9□G40N□-B K9G□B(C)		0.60	0.71	0.99	1.19	1.49	1.79	1.98	2.48	2.98	3.57	3.57	4.47	5.36	6.43	7.14	8.04	10	10	10	10	10	10	10	10
		6.0	7.1	9.9	11.9	14.9	17.9	19.8	24.8	29.8	35.7	35.7	44.7	53.6	64.3	71.4	80.4	100	100	100	100	100	100	100	100

* Gearhead and decimal gearhead are sold separately.

* The code in □ of gearhead model is for gear ratio.

* color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor, Others indicate rotation in the opposite direction.

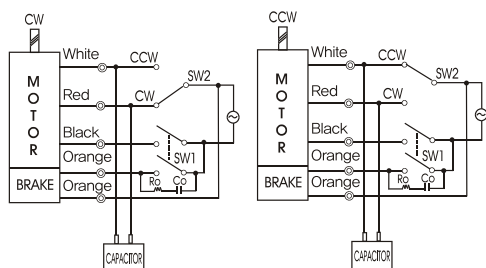
* If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 10N · m/100kg·cm.

* RPM is based on motor's synchronous rpm (50HZ:1500rpm, 60HZ:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

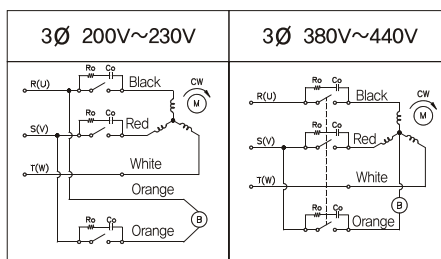
GEARHEADS

CONNECTION DIAGRAMS

single phase motor



three phase motor



connecting two leadwires of U,V,W in turns

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

Connect Cr circuit for absorbing surge voltage as connection diagram to protect contact point.
 $R_o = 5 - 200\Omega$
 $C_o = 0.1 \sim 0.2\mu F$ 200WV(400WV)

DIMENSIONS

K9G□B(C)

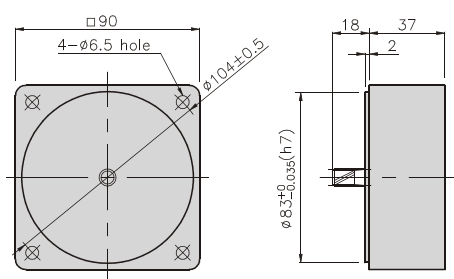


K9□G40N□-B + K9G□B(C)



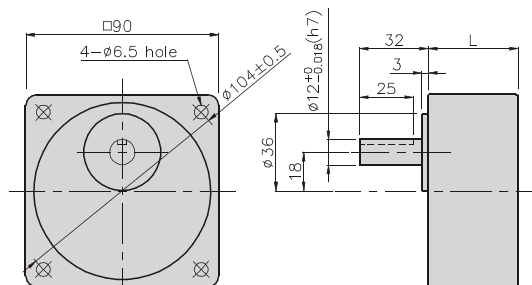
DECIMAL GEARHEAD

K9G10BX



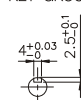
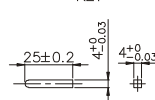
GEARHEAD

K9G□B(C)



• KEY

• KEY GROOVE



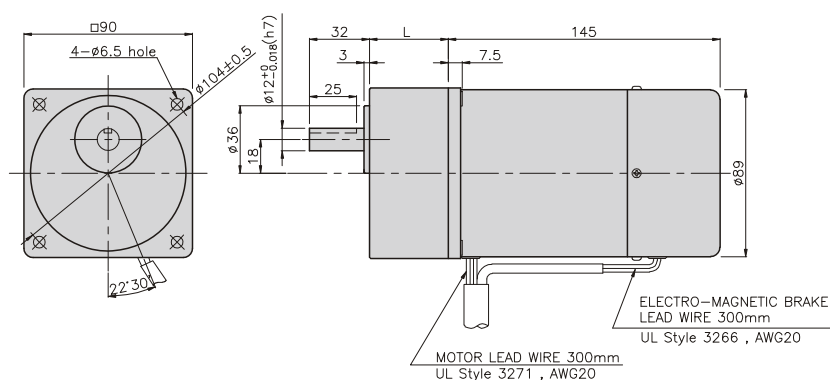
DIMENSION TABLE

PART No.	L	Application Model	Mounting BOLT
01	42	K9G3~18B(C)	M6 P1,0 X 65
02	60	K9G20~200B(C)	M6 P1,0 X 80
03	37	K9G10BX	M6 P1,0 X 120

WEIGHT

PART	WEIGHT(kg)
MOTOR	2,86
DECIMAL GEAR HEAD	0,60
GEAR HEAD	
K9G3~18B(C)	0,78
K9G20~40B(C)	1,04
K9G50~200B(C)	1,14

K9□G40N□-B + K9G□B(C)

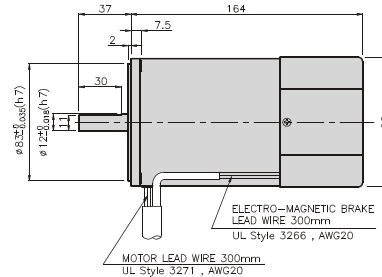
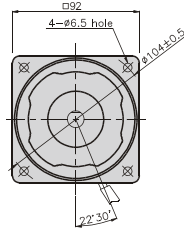


BRAKE MOTOR

60W

□90mm

K9□P60F□-B



SPECIFICATIONS

60W single-phase : 30 minutes rating, three-phase : continuous rating, four poles

Model	Duty	Voltage (V)	Frequency (Hz)	Current (A)	Start T. (N·m / Kgf·cm)	Rated T. (N·m / Kgf·cm)	Speed (rpm)	Condenser (μF)	Friction T. (N·m / Kgf·cm)
K9R□60FJ-B	single-phase	100	50	1.48	0.48/4.8	0.47/4.7	1250	25	1/10
K9R□60FU-B			60	1.66		0.38/3.8	1550		
K9R□60FL-B		110	60	1.25	0.4/4	0.38/3.8	1550	17	1/10
K9R□60FC-B				1.31					
K9R□60FD-B		200	50	0.72	0.5/5	0.47/4.7	1250	6	1/10
K9R□60FT-B			60	0.76		0.39/3.9	1500		
K9R□60FH-B		220	50	0.69	0.45/4.5	0.47/4.7	1250	5	1/10
K9R□60FM-B			60	0.76		0.38/3.8	1550		
K9R□60FV-B		230	50	0.77	0.5/5	0.47/4.7	1250	5	1/10
K9R□60FQ-B			60	0.79		0.38/3.8	1550		
K9R□60FZ-B		240	50	0.75	0.5/5	0.47/4.7	1250	5	1/10
K9I□60FJ-B	three-phase	200	50	0.49	1.35/13.5	0.45/4.5	1300	-	1/10
K9I□60FU-B			60	0.45		0.38/3.8	1550		
K9I□60FL-B		220	50	0.55	1.6/16	0.435/4.35	1350	-	1/10
K9I□60FC-B			60	0.47		0.37/3.7	1600		
K9I□60FD-B		230	50	0.6	1.65/16.5	0.435/4.35	1350	-	1/10
K9I□60FT-B			60	0.52		0.37/3.7	1600		
K9I□60FH-B		380	50	0.34	1.55/15.5	0.435/4.35	1350	-	1/10
K9I□60FM-B			60	0.25		0.37/3.7	1600		
K9I□60FV-B		400	50	0.37	1.85/18.5	0.435/4.35	1350	-	1/10
K9I□60FQ-B			60	0.28		0.37/3.7	1600		
K9I□60FZ-B		415	50	0.26	1.45/14.5	0.45/4.5	1300	-	1/10
K9I□60FZ-B			60	0.21		0.37/3.7	1600		
K9I□60FZ-B		440	50	0.28	1.6/16	0.45/4.5	1300	-	1/10
K9I□60FZ-B			60	0.23		0.37/3.7	1600		

* □ : SHAFT SHAPE (S : STRAIGHT, G : PINION)

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9□60F□-B		1.06	1.27	1.76	2.11	2.64	3.17	3.52	3.96	4.76	5.71	6.34	7.14	8.56	10.27	11.42	14.27	17.12	20	20	20	20	20	20	20
K9P□B, BF		10.6	12.7	17.6	21.1	26.4	31.7	35.2	39.6	47.6	57.1	63.4	71.4	85.6	102.7	114.2	142.7	171.2	200	200	200	200	200	200	200

● 60Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9□60F□-B		0.90	1.08	1.50	1.80	2.25	2.70	3.00	3.37	4.05	4.86	5.39	6.07	7.28	8.74	9.71	12.14	14.57	16.39	19.66	20	20	20	20	20
K9P□B, BF		9.0	10.8	15.0	18.0	22.5	27.0	30.0	33.7	40.5	48.6	53.9	60.7	72.8	87.4	97.1	121.4	145.7	163.9	196.6	200	200	200	200	200

* Gearhead and decimal gearhead are sold separately.

* The code in □ of gearhead model is for gear ratio.

* color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.

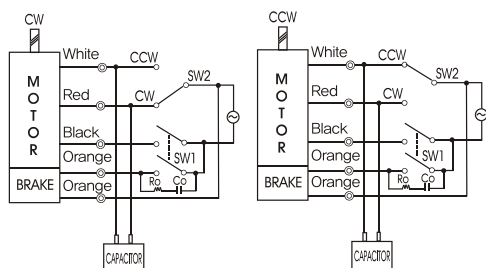
* If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 20N · m/200kgfcm.

* RPM is based on motor's synchronous rpm (50Hz:1500rpm, 60Hz:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

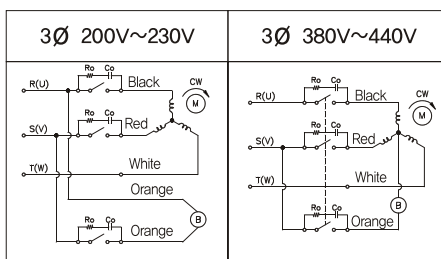
GEARHEADS

CONNECTION DIAGRAMS

single phase motor



three phase motor



connecting two leadwires of U,V,W in turns

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

Connect Cr circuit for absorbing surge voltage as connection diagram to protect contact point.
 $R_o = 5 - 200\Omega$
 $C_o = 0.1 \sim 0.2\mu F$ 200WV(400WV)

DIMENSIONS

K9P□B

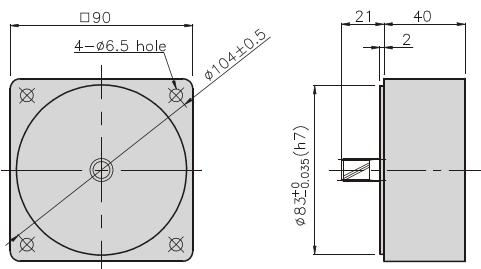


K9P□BF



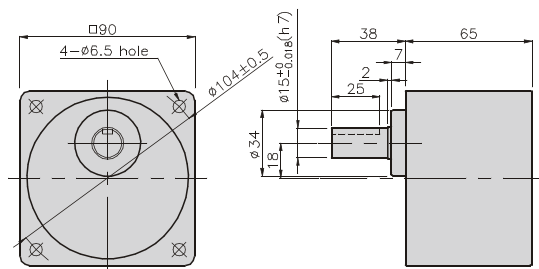
DECIMAL GEARHEAD

K9P10BX



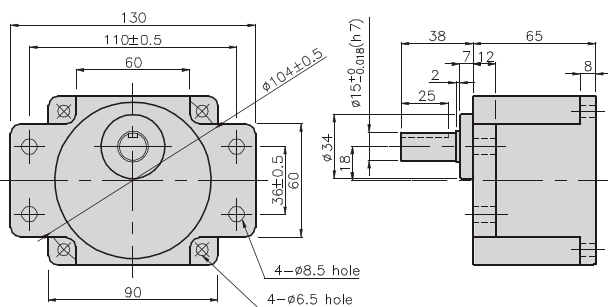
GEARHEAD

K9P□B

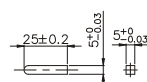


GEARHEAD

K9P□BF



• KEY



• KEY GROOVE



GEARHEADS

DIMENSIONS

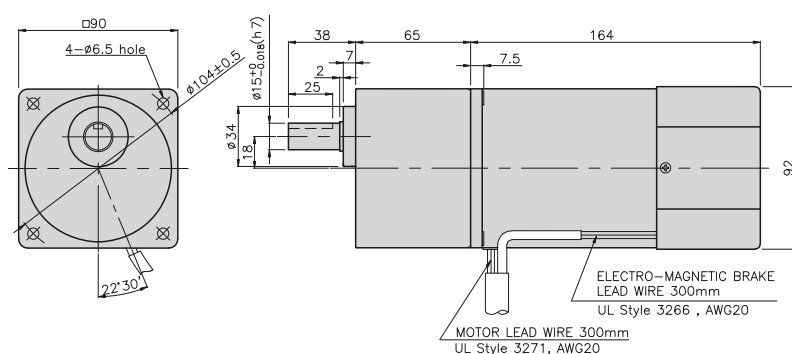
K9□P60F□-B + K9P□B



K9□P60F□-B + K9P□BF



K9□P60F□-B + K9P□B



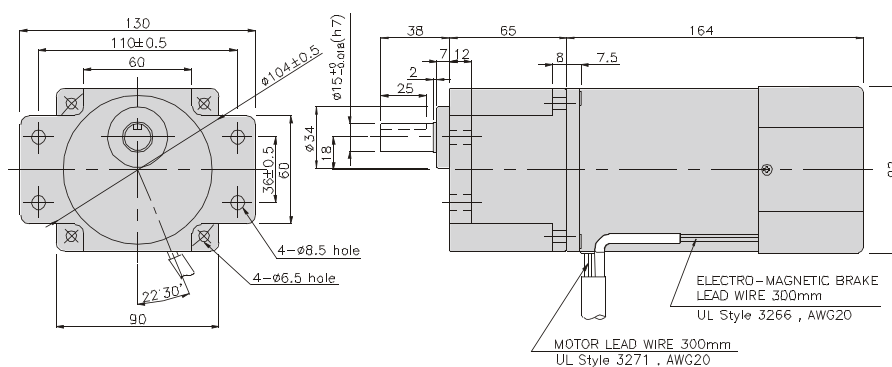
DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	65	K9P3~200B	M6 P1,0 X 25
02	40	K9P10BX	M6 P1,0 X 140

WEIGHT

PART	WEIGHT(kg)
MOTOR	3,08
DECIMAL GEAR HEAD	0,62
GEAR HEAD	
K9P3~10B	1,22
K9P12,5~20B	1,32
K9P25~60B	1,42
K9P75~200B	1,45

K9□P60F□-B + K9P□BF



DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	65	K9P3~200BF	M6 P1,0 X 25
02	40	K9P10BX	M6 P1,0 X 65

WEIGHT

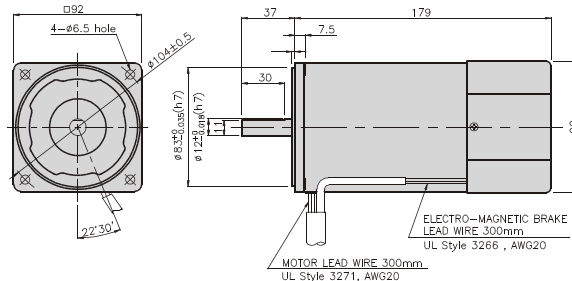
PART	WEIGHT(kg)
MOTOR	3,08
DECIMAL GEAR HEAD	0,62
GEAR HEAD	
K9P3~10BF	1,22
K9P12,5~20BF	1,30
K9P25~60BF	1,42
K9P75~200BF	1,44

BRAKE MOTOR

90W

□90mm

K9□S90F□-B



SPECIFICATIONS

90W single-phase : 30 minutes rating, three-phase : continuous rating, four poles

Model		Duty	Voltage (V)	Frequency (Hz)	Current (A)	Start T. (N*m/Kgf*cm)	Rated T. (N*m/Kgf*cm)	Speed (rpm)	Condenser (μF)	Friction T. (N*m/Kgf*cm)
K9R□90FJ-B	single-phase	30 minutes	100	50	2.52	0.6/6	0.705/7.05	1250	35	1/10
				60	2.42		0.57/5.7	1550		
K9R□90FU-B			110	60	1.88	0.55/5.5	0.57/5.7	1550	25	1/10
					2.12					
K9R□90FL-B			200	50	0.9	0.55/5.5	0.705/7.05	1250	8	1/10
				60	1.1		0.57/5.7	1550		
K9R□90FC-B			220	50	1	0.5/5	0.705/7.05	1250	7	1/10
				60	1.1	0.53/5.3	0.57/5.7	1550		
			230	50	1.3	0.6/6	0.705/7.05	1250		
				60	1.1		0.57/5.7	1550		
K9R□90FD-B		240	50	0.94	0.55/5.5	0.705/7.05	1250	6	1/10	
K9I□90FT-B	three-phase	continuous	200	50	0.79	2.25/22.5	0.65/6.5	1350	-	1/10
				60	0.72	1.75/17.5	0.55/5.5	1600		
K9I□90FH-B			220	50	0.72	2.35/23.5	0.65/6.5	1350	-	1/10
				60	0.63	1.8/18	0.55/5.5	1600		
			230	50	0.86	2.45/24.5	0.65/6.5	1350		
				60	0.66	1.95/19.5	0.55/5.5	1600		
K9I□90FM-B			380	50	0.43	2.35/23.5	0.65/6.5	1350	-	1/10
				60	0.37	1.7/17	0.55/5.5	1600		
K9I□90FV-B			400	50	0.52	2.65/26.5	0.65/6.5	1350	-	1/10
				60	0.45	2.1/21	0.55/5.5	1600		
K9I□90FQ-B			415	50	0.39	2/20	0.68/6.8	1300	-	1/10
				60	0.31	1.5/15	0.55/5.5	1600		
K9I□90FZ-B			440	50	0.45	2.1/21	0.68/6.8	1300	-	1/10
				60	0.39	1.7/17	0.55/5.5	1600		

* □ : SHAFT SHAPE (S : STRAIGHT, G : PINION)

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N·m / below : kgfcm

Model	Speed(rpm)	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12.5	10	8.3	7.5
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9□P90F□-B		1.58	1.90	2.63	3.16	3.95	4.74	5.27	5.92	7.11	8.53	9.48	10.66	12.79	15.35	17.06	20	20	20	20	20	20	20	20	20
K9P□B, BF		15.8	19.0	26.3	31.6	39.5	47.4	52.7	59.2	71.1	85.3	94.8	106.6	127.9	153.5	170.6	200	200	200	200	200	200	200	200	200

● 60Hz

unit = above : N·m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9□P90F□-B		1.34	1.60	2.23	2.67	3.34	4.01	4.46	5.01	6.01	7.22	8.02	9.02	10.83	12.99	14.43	18.0	20	20	20	20	20	20	20	20
K9P□B, BF		13.4	16.0	22.3	26.7	33.4	40.1	44.6	50.1	60.1	72.2	80.2	90.2	108.3	129.9	144.3	180	200	200	200	200	200	200	200	200

* Gearhead and decimal gearhead are sold separately.

* The code in □ of gearhead model is for gear ratio.

* ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.

* If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 20N·m/200kgfcm.

* RPM is based on motor's synchronous rpm (50HZ:1500rpm, 60HZ:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

GEARHEADS

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	500	416	300	250	200	166	150	120	100	82	75	60	50	41	37	30	25	20	16	15	13	10	8,3	7,5
Motor/ Gearhead	Ratio	3	3,6	5	6	7,5	9	10	12,5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9□P90F□-B K9P□BU, BUF		1,58	1,90	2,63	3,16	3,95	4,74	5,27	5,92	7,11	8,53	9,48	10,66	12,79	15,35	17,06	21,32	25,59	30	30	30	30	30	30	30
		15,8	19,0	26,3	31,6	39,5	47,4	52,7	59,2	71,1	85,3	94,8	106,6	127,9	153,5	170,6	213,2	255,9	300	300	300	300	300	300	300

● 60Hz

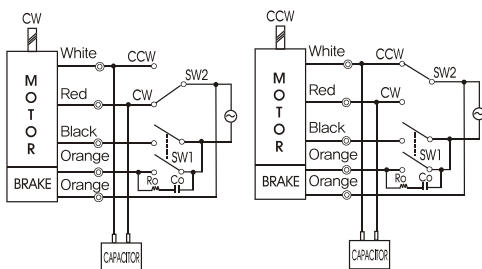
unit = above : N · m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
Motor/ Gearhead	Ratio	3	3,6	5	6	7,5	9	10	12,5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9□P90F□-B K9P□BU, BUF		1,34	1,60	2,23	2,67	3,34	4,01	4,46	5,01	6,01	7,22	8,02	9,02	10,83	12,99	14,43	18,04	21,65	24,36	30	30	30	30	30	30
		13,4	16,0	22,3	26,7	33,4	40,1	44,6	50,1	60,1	72,2	80,2	90,2	108,3	129,9	144,3	180,4	216,5	243,6	300	300	300	300	300	300

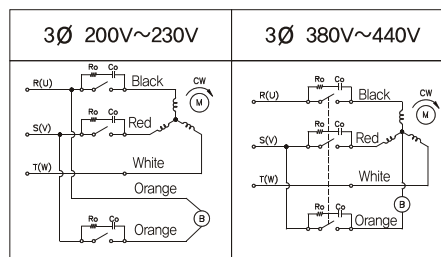
- * Gearhead and decimal gearhead are sold separately.
- * The code in □ of gearhead model is for gear ratio.
- * color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
- * If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 30N · m/300kgfcm.
- * RPM is based on motor's synchronous rpm (50HZ:1500rpm, 60HZ:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

CONNECTION DIAGRAMS

single phase motor



three phase motor



connecting two leadwires
of U,V,W in turns

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

Connect Cr circuit for absorbing
serge voltage as connection
diagram to protect contact point.
Ro = 5 - 200Ω
Co = 0,1 ~ 0,2μF 200WV(400WV)

GEARHEADS

DIMENSIONS

K9P□B



K9P□BF, BUF

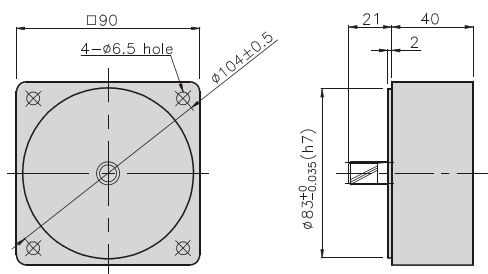


K9P□BU



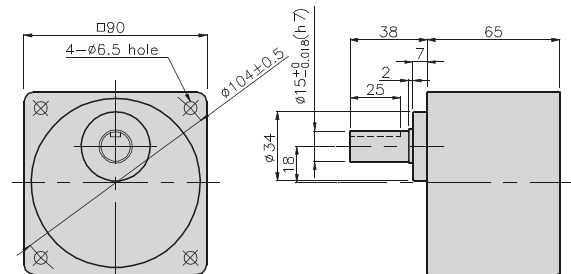
DECIMAL GEARHEAD

K9P10BX



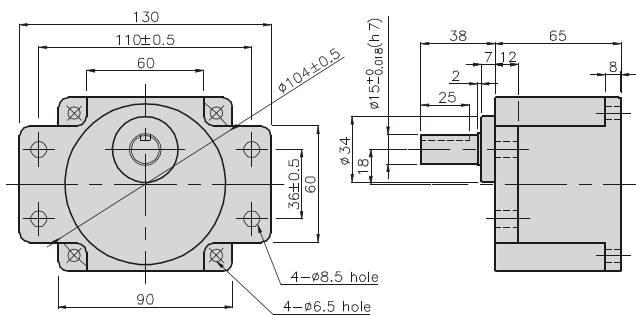
GEARHEAD

K9P□B



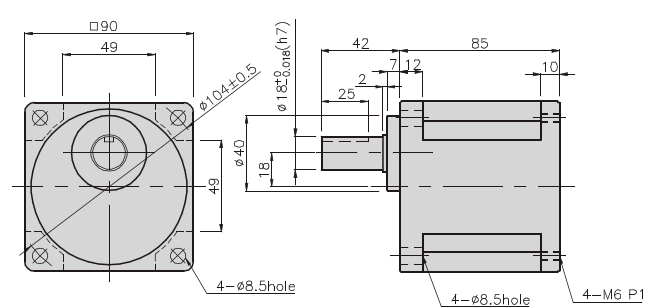
GEARHEAD

K9P□BF



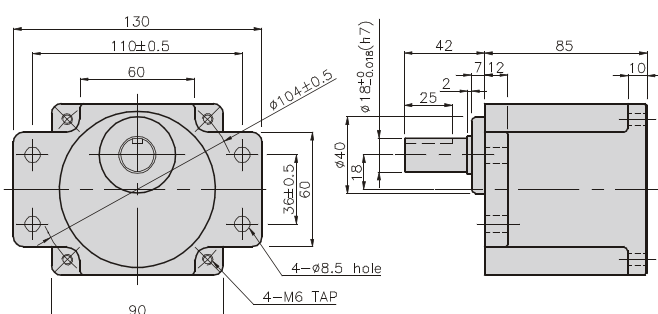
GEARHEAD

K9P□BU

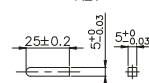


GEARHEAD

K9P□BUF



• KEY



• KEY GROOVE



GEARHEADS

DIMENSIONS

K9□P90F□-B + K9P□B



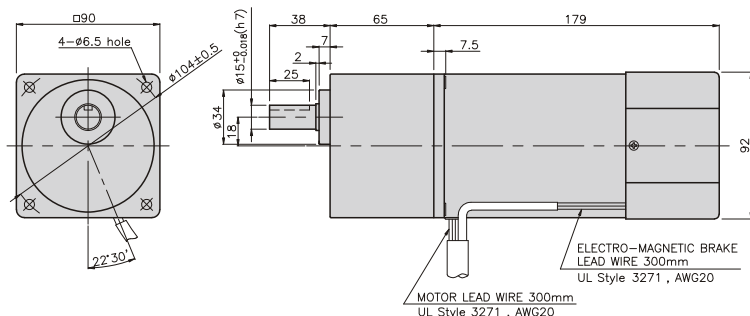
K9□P90F-B + K9P□BF, BUF



K9□P90F□-B + K9P□BU



K9□P90F□-B + K9P□B



WEIGHT

PART	WEIGHT(kg)
MOTOR	3,60
DECIMAL GEAR HEAD	0,62

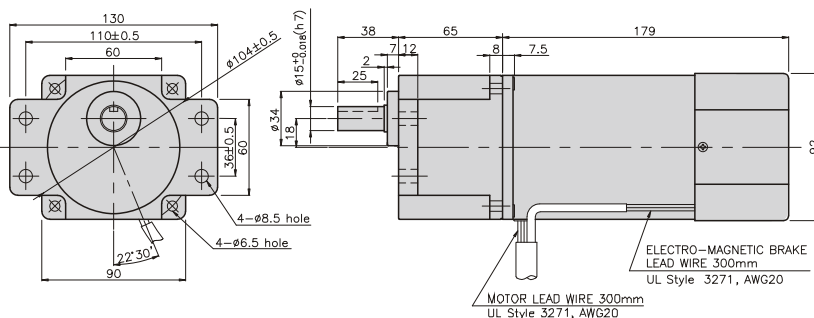
DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	65	K9P3~200B	M6 P1,0 X 95
02	40	K9P10BX	M6 P1,0 X 140

WEIGHT

PART	WEIGHT(kg)
K9P3~10B	1,22
K9P12,5~20B	1,32
K9P25~60B	1,42
K9P75~200B	1,45

K9□P90F-B + K9P□BF



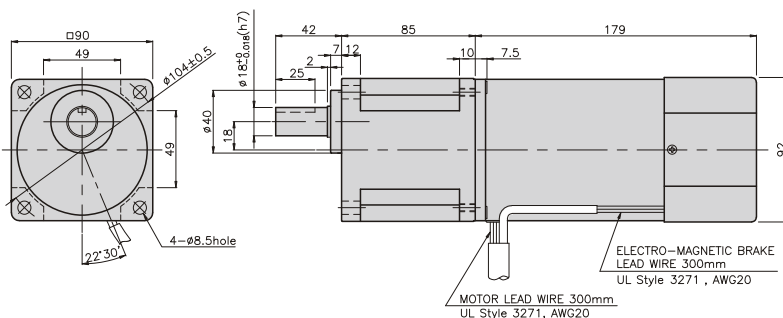
DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	65	K9P3~200BF	M6 P1,0 X 25
02	40	K9P10BX	M6 P1,0 X 65

WEIGHT

PART	WEIGHT(kg)
K9P3~10BF	1,22
K9P12,5~20BF	1,30
K9P25~60BF	1,42
K9P75~200BF	1,44

K9□P90F□-B + K9P□BU



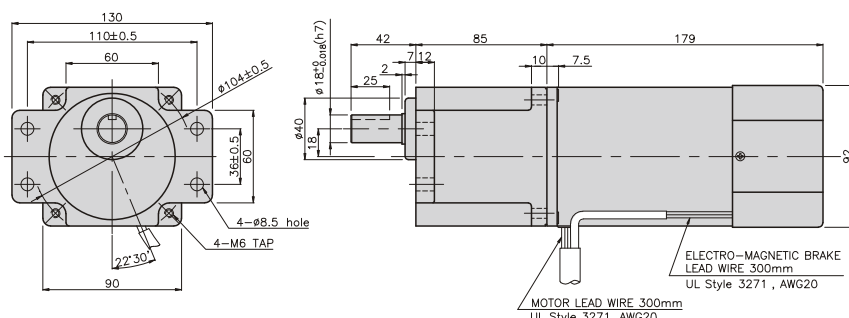
DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	85	K9P3~200BU	M6 P1,0 X 20
02	40	K9P10BX	M6 P1,0 X 60

WEIGHT

PART	WEIGHT(kg)
K9P3~10BU	1,44
K9P12,5~20BU	1,55
K9P25~60BU	1,69
K9P75~200BU	1,74

K9□P90F□-B + K9P□BUF



DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	85	K9P3~200BUF	M6 P1,0 X 20
02	40	K9P10BX	M6 P1,0 X 65

WEIGHT

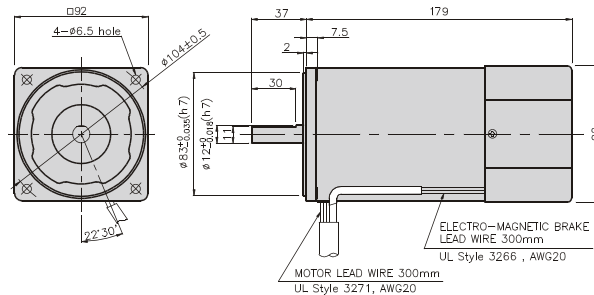
PART	WEIGHT(kg)
K9P3~10BUF	1,50
K9P12,5~20BUF	1,62
K9P25~60BUF	1,76
K9P75~200BUF	1,82

BRAKE MOTOR

120W

□90mm

K9□S120F□-B



SPECIFICATIONS

120W 30 minutes rating, four poles

Model		Duty	Voltage (V)	Frequency (Hz)	Current (A)	Start T. (N*m/Kgf*cm)	Rated T. (N*m/Kgf*cm)	Speed (rpm)	Condenser (μF)	Friction T. (N*m/(Kgf*cm))
K9R□120FJ-B	single-phase	30 minutes	100	50	2,4	0,65/6,5	0,9/9	1300	40	1/10
				60	2,61	0,7/7	0,755/7,55	1550		
K9R□120FU-B			110	60	1,93	0,6/6	0,755/7,55	1550	25	1/10
					115	1,88				
K9R□120FL-B			200	50	1,07	0,6/6	0,9/9	1300	8,5	1/10
				60	1,22	0,58/5,8	0,755/7,55	1550	8	
K9R□120FC-B			220	50	0,82	0,53/5,3	0,9/9	1300	6	1/10
			230		0,85	0,58/5,8				
			220	60	1	0,63/6,3	0,735/7,35	1600	7	
			230		1,1					
K9R□120FD-B			240	50	0,9	0,58/5,8	0,9/9	1300	6	1/10

* □ : SHAFT SHAPE (S : STRAIGHT, G : PINION)

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N·m / below : kgfcm

Model	Speed(rpm)	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	13	10	8.3	7.5
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9RP120F□-B K9P□B, BF		2.19	2.62	3.65	4.37	5.47	6.56	7.29	8.20	9.84	11.81	13.12	14.76	17.71	20	20	20	20	20	20	20	20	20	20	20
		21.9	26.2	36.5	43.7	54.7	65.6	72.9	82.0	98.4	118.1	131.2	147.6	177.1	200	200	200	200	200	200	200	200	200	200	200

● 60Hz

unit = above : N·m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9RP120F□-B K9P□B, BF		1.79	2.14	2.98	3.57	4.47	5.36	5.95	6.70	8.04	9.64	10.72	12.06	14.47	17.36	19.29	20	20	20	20	20	20	20	20	20
		17.9	21.4	29.8	35.7	44.7	53.6	59.5	67.0	80.4	96.4	107.2	120.6	144.7	173.6	192.9	200	200	200	200	200	200	200	200	200

* Gearhead and decimal gearhead are sold separately.

* The code in □ of gearhead model is for gear ratio.

* ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.

* If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 20N·m/200kgfcm.

* RPM is based on motor's synchronous rpm (50Hz:1500rpm, 60Hz:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

GEARHEADS

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	13	10	8.3	7.5
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9RP120F□-B		2,19	2,62	3,65	4,37	5,47	6,56	7,29	8,20	9,84	11,81	13,12	14,76	17,71	21,26	23,62	30	30	30	30	30	30	30	30	30
K9P□BU, BUF		21,9	26,2	36,5	43,7	54,7	65,6	72,9	82,0	98,4	118,2	131,2	147,6	177,1	212,6	236,2	300	300	300	300	300	300	300	300	300

● 60Hz

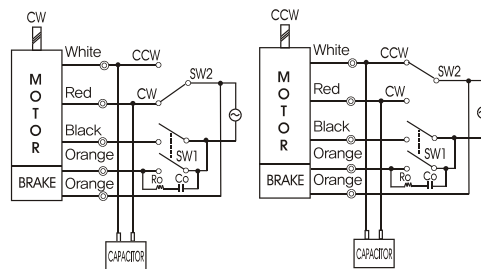
unit = above : N · m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9RP120F□-B		1,79	2,14	2,98	3,57	4,47	5,36	5,95	6,70	8,04	9,64	10,72	12,06	14,47	17,36	19,29	24,11	28,93	30	30	30	30	30	30	30
K9P□BU, BUF		17,9	21,4	29,8	35,7	44,7	53,6	59,5	67,0	80,4	96,4	107,2	120,6	144,7	173,6	192,9	241,1	289,3	300	300	300	300	300	300	300

- * Gearhead and decimal gearhead are sold separately.
- * The code in □ of gearhead model is for gear ratio.
- * color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
- * If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 30N · m/300kgfcm.
- * RPM is based on motor's synchronous rpm (50HZ:1500rpm, 60HZ:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

CONNECTION DIAGRAMS

Connect Cr circuit for absorbing surge voltage as connection diagram to protect contact point.
 $R_o = 5 \sim 200\Omega$
 $C_o = 0.1 \sim 0.2\mu F$ 200WV(400WV)



DIMENSION TABLE

PART No	M	Application Model
01	200	50Hz
02	179	60Hz

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

GEARHEADS

DIMENSIONS

K9P□B



K9P□BF, BUF

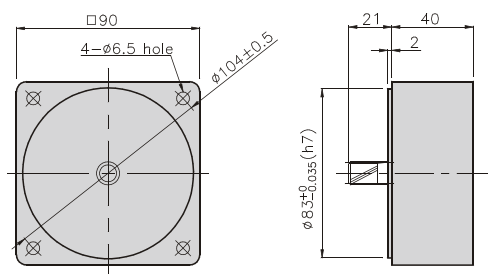


K9P□BU



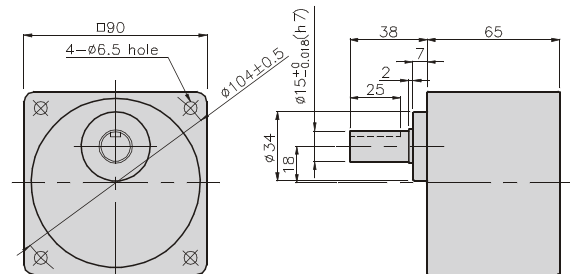
DECIMAL GEARHEAD

K9P10BX



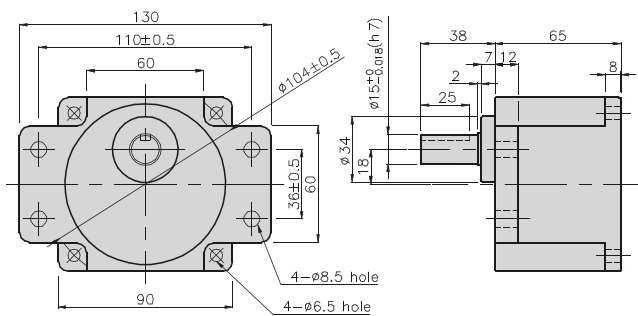
GEARHEAD

K9P□B



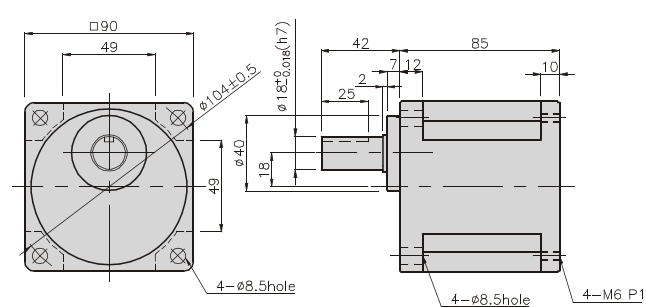
GEARHEAD

K9P□BF



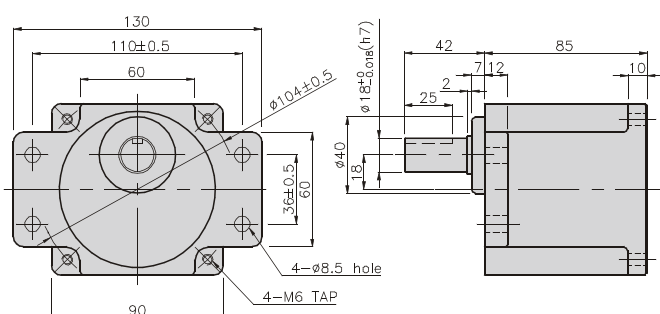
GEARHEAD

K9P□BU

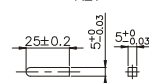


GEARHEAD

K9P□BUF



• KEY



• KEY GROOVE



K9□P120F□-B + K9P□B



K9□P120F□-B + K9P□BF, BUF



K9□P120F□-B + K9P□BU



Technical drawing of the UL Style 3271, AWG20 electro-magnetic brake. The drawing includes a top view of the square mounting flange and a side view of the cylindrical body.

Top View Dimensions:

- Central hole diameter: $\varnothing 9.0$
- Four mounting holes: $4-\varnothing 6.5$ hole
- Diagonal hole diameter: $\varnothing 10.4 \pm 0.5$
- Flange thickness: 2.2
- Flange width: 30

Side View Dimensions:

- Total length: M
- Mounting flange diameter: 38
- Mounting flange thickness: 7
- Lead wire connector diameter: 25
- Lead wire connector length: 2
- Lead wire connector diameter: $\varnothing 15 \pm 0.8$ (h 7)
- Lead wire connector length: 15
- Lead wire connector diameter: $\varnothing 3.4$
- Lead wire connector length: 18
- Lead wire connector diameter: 92

Labels:

- ELECTRO-MAGNETIC BRAKE LEAD WIRE 300mm UL Style 3271, AWG20
- MOTOR LEAD WIRE 300mm UL Style 3271, AWG20

[illegible][illegible]

Technical drawing of the UL Style 3271, AWG20 motor, showing front and side views with dimensions.

Front View Dimensions:

- Overall width: 130
- Overall height: 110 $\pm$ 0.5
- Inner width: 60
- Inner height: 56 $\pm$ 0.5
- Flange thickness: 60
- Flange hole diameter: ϕ 104 $\pm$ 0.5
- Flange hole pitch: 4- ϕ 8.5 hole
- Flange hole thread: 4-M6 TAP
- Flange hole angle: 22°30'
- Overall diameter: 90

Side View Dimensions:

- Overall length: M
- Motor lead wire length: 300mm
- UL Style 3271, AWG20
- Electro-magnetic brake lead wire length: 300mm
- UL Style 3271, AWG20
- Motor lead wire length: 300mm
- UL Style 3271, AWG20
- Electro-magnetic brake lead wire length: 300mm
- UL Style 3271, AWG20

PART	WEIGHT(kg)
MOTOR	3,20
DECIMAL GEAR HEAD	0.62

PART No	M	Application Model
01	155	50Hz
02	135	60Hz

PART No.	L	Application Model	Mounting BOLT
01	65	K9P3~200B	M6 P1.0 X 95
02	40	K9P10BX	M6 P1.0 X 140

PART	WEIGHT(kg)
K9P3~10B	1.22
K9P12.5~20B	1.32
K9P25~60B	1.42
K9P75~200B	1.45

PART No	L	Application Model	Mounting BOLT
01	65	K9P3~200BF	M6 P1.0 X 25
02	40	K9P10BX	M6 P1.0 X 65

PART	WEIGHT(kg)
K9P3~10BF	1.22
K9P12.5~20BF	1.30
K9P25~60BF	1.42
K9P75~200BF	1.44

PART No	L	Application Model	Mounting BOLT
01	85	K9P3~200BU	M6 P1.0 X 20
02	40	K9P10BX	M6 P1.0 X 60

PART	WEIGHT(kg)
K9P3~10BU	1,44
K9P12,5~20BU	1,55
K9P25~60BU	1,69
K9P75~200BU	1,74

PART No	L	Application Model	Mounting BOLT
01	85	K9P3~200BUF	M6 P1.0 X 20
02	40	K9P10BX	M6 P1.0 X 65

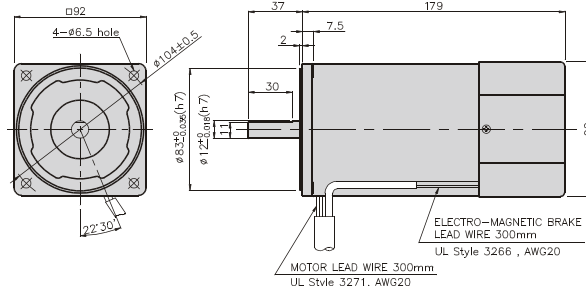
PART	WEIGHT(kg)
K9P3~10BUF	1.50
K9P12.5~20BUF	1.62
K9P25~60BUF	1.76
K9P75~200BUF	1.82

BRAKE MOTOR

150W

□90mm

K9□S150F□-B



SPECIFICATIONS

150W continuous rating, four poles

Model		Duty	Voltage (V)	Frequency (Hz)	Current (A)	Start T. (N*m/ Kgf*cm)	Rated T. (N*m/ Kgf*cm)	Speed (rpm)	Condenser (μF)	Friction T. (N*m/ (Kgf*cm)
K9I□150FT-B	single-phase	30 minutes	200	50	1,2	3,5/35	1,13/11,3	1300	—	1/10
				60	0,95	2,65/26,5	0,915/9,15	1600		
K9I□150FH-B			220	50	0,99	2,95/29,5	1,13/11,3	1300	—	1/10
			230		1,1	3/30				
			220	60	0,97	2,5/25	0,915/9,15	1600	—	
			230		1,02	2,7/27				
K9I□150FM-B			380	50	0,57	3/30	1,13/11,3	1300	—	1/10
				60		2,25/22,5	0,915/9,15	1600		
K9I□150FV-B			400	50	0,6	3,5/35	1,13/11,3	1300	—	1/10
				60		2,5/25	0,915/9,15	1600		
K9I□150FQ-B			415	50	0,57	3,15/31,5	1,13/11,3	1300	—	1/10
				60	0,42	2,35/23,5	0,915/9,15	1600		
K9I□150FZ-B			440	50	0,53	3,3/33	1,085/10,82	1350	—	1/10
				60	0,44	2,6/26	0,915/9,15	1600		

* □ : SHAFT SHAPE (S : STRAIGHT, G : PINION)

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	13	10	8,3	7,5
Motor/ Gearhead	Ratio	3	3,6	5	6	7,5	9	10	12,5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9IP150F□-B K9P□B, BF		2,64	3,16	4,39	5,27	6,59	7,91	8,79	9,89	11,86	14,24	15,82	17,80	20	20	20	20	20	20	20	20	20	20	20	20
		26,4	31,6	43,9	52,7	65,9	79,1	87,9	98,9	118,6	142,4	158,2	178,0	200	200	200	200	200	200	200	200	200	200	200	200

● 60Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
Motor/ Gearhead	Ratio	3	3,6	5	6	7,5	9	10	12,5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9IP150F□-B K9P□B, BF		2,22	2,67	3,71	4,45	5,56	6,67	7,41	8,34	10,01	12,01	13,34	15,01	18,01	20	20	20	20	20	20	20	20	20	20	20
		22,2	26,7	37,1	44,5	55,6	66,7	74,1	83,4	100,1	120,1	133,4	150,1	180,1	200	200	200	200	200	200	200	200	200	200	200

* Gearhead and decimal gearhead are sold separately.

* The code in □ of gearhead model is for gear ratio.

* ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor, Others indicate rotation in the opposite direction.

* If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 20N · m/200kgfcm.

* RPM is based on motor's synchronous rpm (50HZ:1500rpm, 60HZ:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

GEARHEADS

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	13	10	8,3	7,5
Motor/ Gearhead	Ratio	3	3,6	5	6	7,5	9	10	12,5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9IP150F□-B		2,64	3,16	4,39	5,27	6,59	7,91	8,79	9,89	11,86	14,24	15,82	17,80	21,36	25,63	28,47	30	30	30	30	30	30	30	30	30
K9P□BU, BUF		26,4	31,6	43,9	52,7	65,9	79,1	87,9	98,9	118,6	142,4	158,2	178,0	213,6	256,3	284,7	300	300	300	300	300	300	300	300	300

● 60Hz

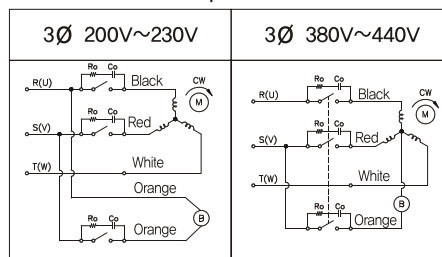
unit = above : N · m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
Motor/ Gearhead	Ratio	3	3,6	5	6	7,5	9	10	12,5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9IP150F□-B		2,22	2,67	3,71	4,45	5,56	6,67	7,41	8,34	10,01	12,01	13,34	15,01	18,01	21,61	24,01	30	30	30	30	30	30	30	30	30
K9P□BU, BUF		22,2	26,7	37,1	44,5	55,6	66,7	74,1	83,4	100,1	120,1	133,4	150,1	180,1	216,1	240,1	300	300	300	300	300	300	300	300	300

- * Gearhead and decimal gearhead are sold separately.
- * The code in □ of gearhead model is for gear ratio.
- * color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.
- * If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 30N · m/300kgfcm.
- * RPM is based on motor's synchronous rpm (50HZ:1500rpm, 60HZ:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

CONNECTION DIAGRAMS

three phase motor



Connect Cr circuit for absorbing surge voltage as connection diagram to protect contact point.
 $R_o = 5 \sim 200\Omega$
 $C_o = 0,1 \sim 0,2\mu F$ 200WV(400WV)

DIMENSION TABLE

PART No	M	Application Model
01	200	50Hz
02	179	60Hz

※The direction of motor rotation is as viewed from the front shaft end of the motor connecting two leadwires of U,V,W in turns

GEARHEADS

DIMENSIONS

K9P□B



K9P□BF, BUF

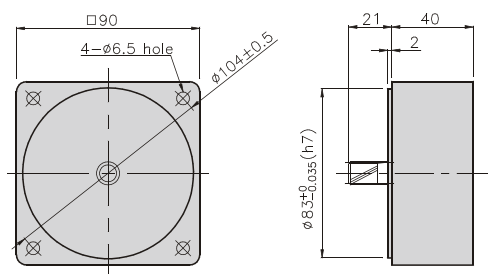


K9P□BU



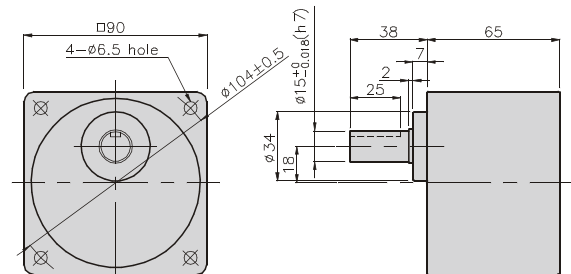
DECIMAL GEARHEAD

K9P10BX



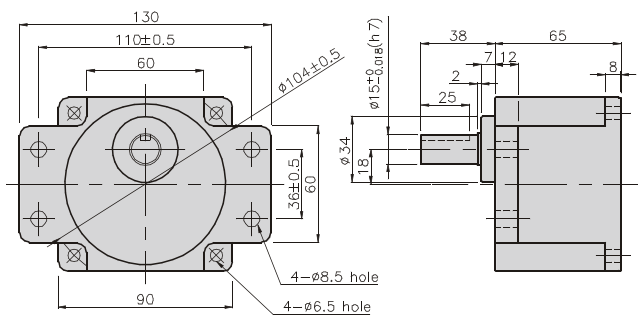
GEARHEAD

K9P□B



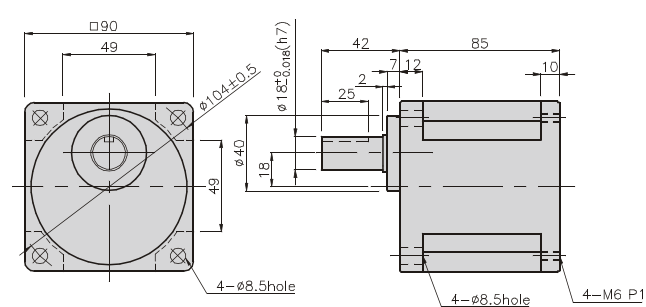
GEARHEAD

K9P□BF



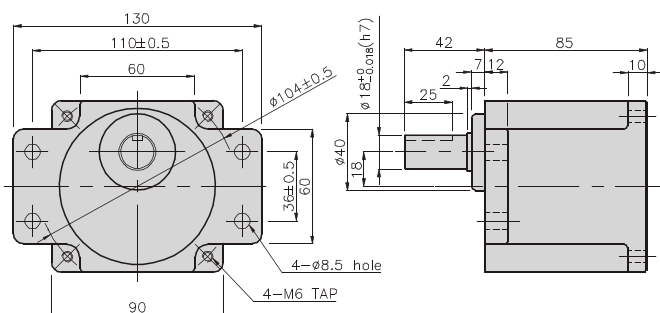
GEARHEAD

K9P□BU

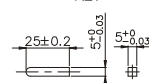


GEARHEAD

K9P□BUF



• KEY



• KEY GROOVE



K9□P150F□-B + K9P□B



K9□P150F□-B + K9P□BF, BUF



K9□P150F□-B + K9P□BU



Technical drawing of the UL Style 3271, AWG20 electro-magnetic brake. The drawing includes a front view on the left and a side view on the right.

Front View Dimensions:

- Outer square flange: 90
- Four mounting holes: 4- $\phi 26.5$ hole
- Central shaft hole: $\phi 104 \pm 0.5$
- Mounting holes: 22° 30'

Side View Dimensions:

- Mounting bracket: 38
- Main body: 65
- Lead wire exit: 7.5
- Total length: M
- Height: 92
- Lead wire: ELECTRO-MAGNETIC BRAKE LEAD WIRE 300mm
- Motor lead wire: MOTOR LEAD WIRE 300mm
- UL Style 3271, AWG20

[illegible]

Technical drawing of the UL Style 3271 motor, showing front and side views with dimensions.

Front View Dimensions:

- Overall width: 90
- Inner width: 49
- Outer diameter: $\phi 104 \pm 0.5$
- Inner diameter: $\phi 40$
- Mounting holes: 4- $\phi 8.5$ hole
- Angle: $22^\circ 30'$

Side View Dimensions:

- Overall length: M
- Shaft diameter: $\phi 18 \pm 0.04$ (h7)
- Shaft length: 42
- Shaft offset: 2
- Shaft diameter: 7.12
- Shaft diameter: 25
- Shaft diameter: 18
- Motor body length: 85
- Motor body offset: 10
- Motor body offset: 7.5
- Motor body diameter: 92
- Motor lead wire length: MOTOR LEAD WIRE 300mm
- UL Style 3271, AWG20
- Electro-magnetic brake lead wire length: ELECTRO-MAGNETIC BRAKE LEAD WIRE 300mm
- UL Style 3271, AWG20

MOTOR LEAD WIRE 300mm
UL Style 3271. AWG20

ELECTRO-MAGNETIC BRAKE
LEAD WIRE 300mm
UL Style 3271 , AWG20

PART	WEIGHT(kg)
MOTOR	4.38(50Hz)
	3.66(60Hz)
DECIMAL GEAR HEAD	0.62

PART No	M	Application Model
01	155	50Hz
02	135	60Hz

PART No	L	Application Model	Mounting BOLT
01	65	K9P3~200B	M6 P1,0 X 95
02	40	K9P10BX	M6 P1,0 X 140

PART	WEIGHT(kg)
K9P3~10B	1,22
K9P12.5~20B	1,32
K9P25~60B	1,42
K9P75~200B	1,45

PART No	L	Application Model	Mounting BOLT
01	85	K9P3~200BF	M6 P1,0 X 25
02	40	K9P10BX	M6 P1,0 X 65

PART	WEIGHT(kg)
K9P3~10BF	1,22
K9P12,5~20BF	1,30
K9P25~60BF	1,42
K9P75~200BF	1,44

PART No.	L	Application Model	Mounting BOLT
01	85	K9P3~200BU	M6 P1,0 X 20
02	40	K9P10BX	M6 P1,0 X 60

PART	WEIGHT(kg)
K9P3~10BU	1.44
K9P12.5~20BU	1.55
K9P25~60BU	1.69
K9P75~200BU	1.74

PART No	L	Application Model	Mounting BOLT
01	85	K9P3~200BUF	M6 P1,0 X 20
02	40	K9P10BX	M6 P1,0 X 65

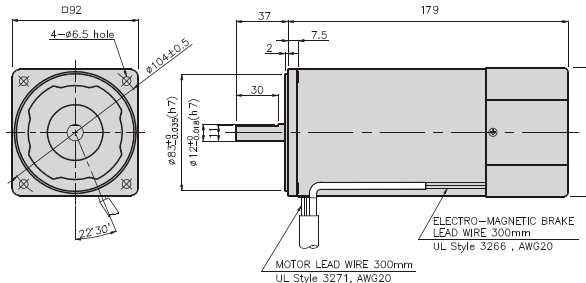
PART	WEIGHT(kg)
K9P3~10BUF	1,50
K9P12,5~20BUF	1,62
K9P25~60BUF	1,76
K9P75~200BUF	1,82

BRAKE MOTOR

180W

□90mm

K9□S180F□-B



SPECIFICATIONS

180W 30 minutes rating, four poles

Model		Duty	Voltage (V)	Frequency (Hz)	Current (A)	Start T. (N*m/ Kg*cm)	Rated T. (N*m/ Kg*cm)	Speed (rpm)	Condenser (μF)	Friction T. (N*m/ (Kg*cm)
K9R□180FJ-B	single-phase	30 minutes	100	50	3,1	0,7/7	1,35/13,5	1300	40	1/10
				60	2,95	0,75/7,5	1,1/11	1600		
K9R□180FU-B			110	60	2,9	0,85/8,5	1,1/11	1600	40	1/10
			115		3,1					
K9I□180FL-B			200	50	1,47	0,65/6,5	1,35/13,5	1300	12	1/10
				60	1,43	0,55/5,5	1,1/11	1600		
K9R□180FC-B			220	50	1,58	0,65/0,6	1,35/13,5	1300	8	1/10
				60	1,38	0,6/6	1,1/11	1600		
			230	50	1,7	0,7/7	1,35/13,5	1300		
				60	1,54	0,65/6,5	1,1/11	1600		
K9R□180FD-B			240	50	1,2	0,7/7	1,35/13,5	1300	8	1/10

* □ : SHAFT SHAPE (S : STRAIGHT, G : PINION)

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9RP180F□-B		3.28	3.94	5.47	6.56	8.20	9.84	10.94	12.30	14.76	17.71	19.68	22.14	26.57	30	30	30	30	30	30	30	30	30	30	30
K9P□BU, BUF		32.8	39.4	54.7	65.6	82.0	98.4	109.4	123.0	147.6	177.1	196.8	221.4	265.7	300	300	300	300	300	300	300	300	300	300	300

● 60Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	29	18	15	12	10	9
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9RP180F□-B		2.67	3.21	4.46	5.35	6.68	8.02	8.91	10.02	12.03	14.43	16.04	18.04	21.65	25.98	28.87	30	30	30	30	30	30	30	30	30
K9P□BU, BUF		26.7	32.1	44.6	53.5	66.8	80.2	89.1	100.2	120.3	144.3	160.4	180.4	216.5	259.8	288.7	300	300	300	300	300	300	300	300	300

* Gearhead and decimal gearhead are sold separately.

* The code in □ of gearhead model is for gear ratio.

* ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor, Others indicate rotation in the opposite direction.

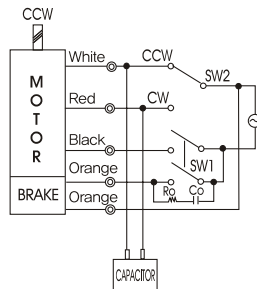
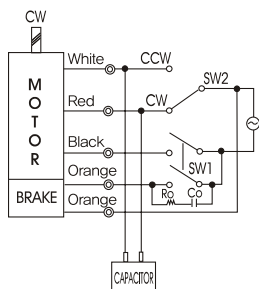
* If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 30N · m/300kgfcm.

* RPM is based on motor's synchronous rpm (50HZ:1500rpm, 60HZ:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

GEARHEADS

CONNECTION DIAGRAMS

Connect Cr circuit for absorbing surge voltage as connection diagram to protect contact point.
 $R_o = 5 - 200\Omega$
 $C_o = 0.1 \sim 0.2\mu F$ 200WV(400WV)



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

DIMENSIONS

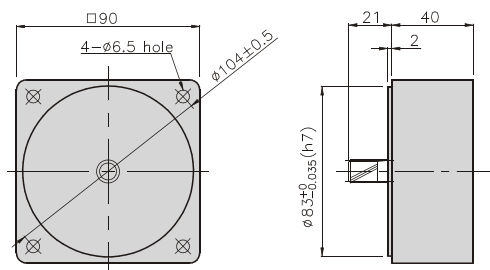
K9P□BU



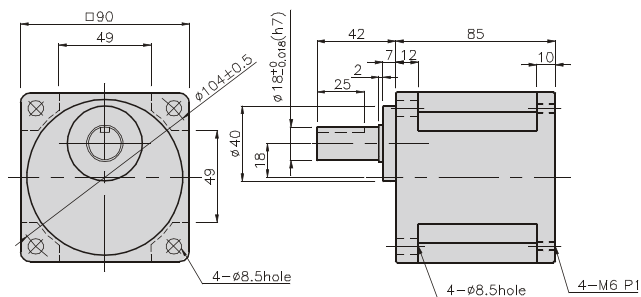
K9P□BUF



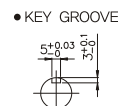
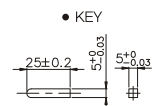
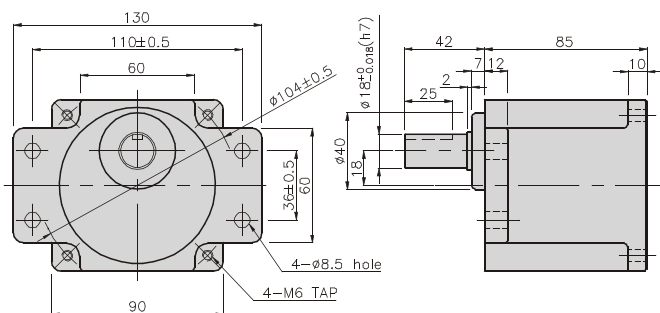
DECIMAL GEARHEAD
K9P10BX



GEARHEAD
K9P□BU



GEARHEAD
K9P□BUF



GEARHEADS

DIMENSIONS

K9RP180F□-B + K9P□BU



K9RP180F□-B + K9P□BUF



WEIGHT

PART	WEIGHT(kg)
MOTOR	4.34
DECIMAL GEAR HEAD	0.62

DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	85	K9P3~200B	M6 P1.0 X 20
02	40	K9P10BX	M6 P1.0 X 60

WEIGHT

PART	WEIGHT(kg)
K9P3~10BU	1.44
K9P12.5~20BU	1.55
K9P25~60BU	1.69
K9P75~200BU	1.74

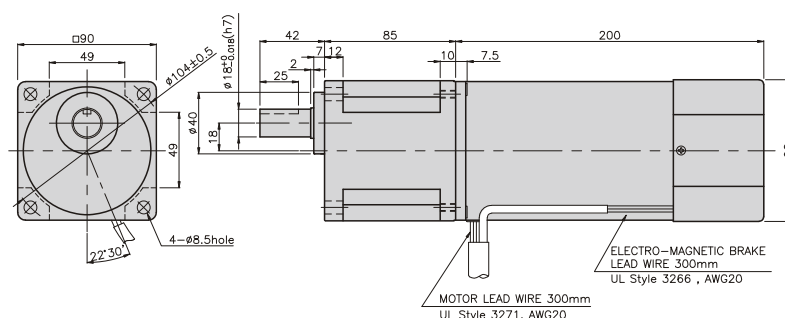
DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	85	K9P3~200BUF	M6 P1.0 X 20
02	40	K9P10BX	M6 P1.0 X 65

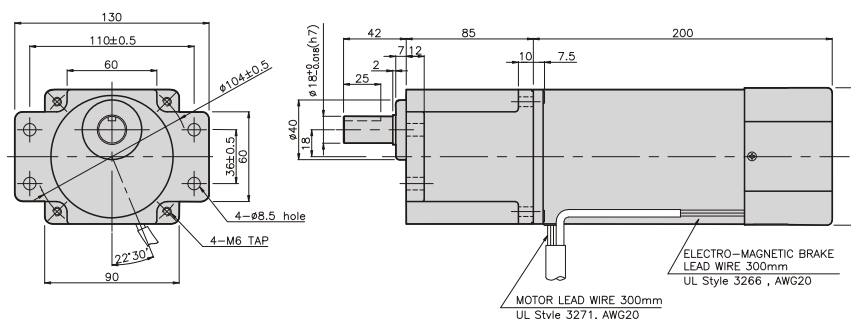
WEIGHT

PART	WEIGHT(kg)
K9P3~10BUF	1.50
K9P12,5~20BUF	1.62
K9P25~60BUF	1.76
K9P75~200BUF	1.82

K9RP180F□-B + K9P□BU



K9RP180F□-B + K9P□BUF

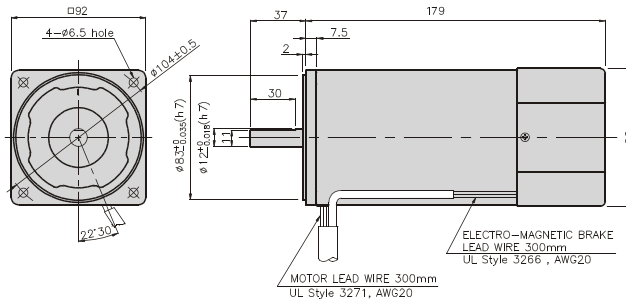


BRAKE MOTOR

200W

□90mm

K9□S200F□-B



SPECIFICATIONS

200W continuous rating, four poles

Model		Duty	Voltage (V)	Frequency (Hz)	Current (A)	Start T. (N·m/ Kgf·cm)	Rated T. (N·m/ Kgf·cm)	Speed (rpm)	Condenser (μF)	Friction T. (N·m/ Kgf·cm)
K9I□200FT-B	single-phase	30 minutes	200	50	1,62	4/40	1,5/15	1300	—	1/10
				60	1,29	3,15/31,5	1,22/12,1	1600		
K9I□200FH-B			220	50	1,36	4,25/42,5	1,45/14,5	1350	—	1/10
				60	1,06	3,4/34	1,22/12,2	1600		
			230	50	1,51	4,3/43	1,45/14,5	1350	—	
				60	1,15	3,5/35	1,22/12,2	1600		
K9I□200FM-B			380	50	0,81	4,3/43	1,45/45,5	1350	—	1/10
				60	0,58	3,6/36	1,22/12,2	1600		
K9I□200FV-B			400	50	0,91	4,5/45	1,45/14,5	1350	—	1/10
				60	0,67	4/40	1,22/12,2	1600		
K9I□200FQ-B			415	50	0,62	3,8/38	1,5/15	1300	—	1/10
				60	0,58	3/30	1,26/12,6	1550		
K9I□200FZ-B			440	50	0,68	4,1/41	1,5/15	1300	—	1/10
				60	0,54	3/30	1,22/12,2	1600		

* □ : SHAFT SHAPE (S : STRAIGHT, G : PINION)

RATED TORQUE OF GEARHEAD

● 50Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	500	416	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	13	10	8.3	7.5
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9IP200F□-B		3.52	4.23	5.87	7.05	8.81	10.57	11.75	13.21	15.86	19.03	21.14	23.78	28.54	30	30	30	30	30	30	30	30	30	30	30
K9P□BU, BUF		35.2	42.3	58.7	70.5	88.1	105.7	117.5	132.1	158.6	190.3	211.4	237.8	285.4	300	300	300	300	300	300	300	300	300	300	300

● 60Hz

unit = above : N · m / below : kgfcm

Model	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
Motor/ Gearhead	Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9IP200F□-B		2.96	3.56	4.94	5.93	7.41	8.89	9.88	11.12	13.34	16.01	17.79	20.01	24.01	28.82	30	30	30	30	30	30	30	30	30	30
K9P□BU, BUF		29.6	35.6	49.4	59.3	74.1	88.9	98.8	111.2	133.4	160.1	177.9	200.1	240.1	288.2	300	300	300	300	300	300	300	300	300	300

* Gearhead and decimal gearhead are sold separately.

* The code in □ of gearhead model is for gear ratio.

* ■ color indicates that the output shaft of the geared motor rotates in the same direction as the output shaft of the motor. Others indicate rotation in the opposite direction.

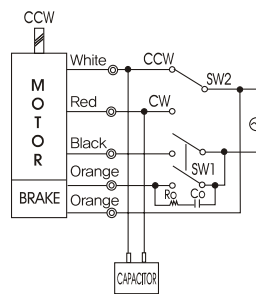
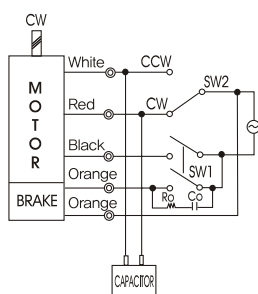
* If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 30N · m/300kgfcm.

* RPM is based on motor's synchronous rpm (50Hz:1500rpm, 60Hz:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2~20% less than indicating rpm according to load size.

GEARHEADS

CONNECTION DIAGRAMS

Connect Cr circuit for absorbing surge voltage as connection diagram to protect contact point.
 $R_o = 5 - 200\Omega$
 $C_o = 0.1 \sim 0.2\mu F$ 200WV(400WV)



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

DIMENSIONS

K9P□BU

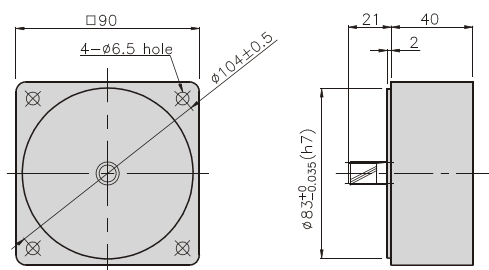


K9P□BUF



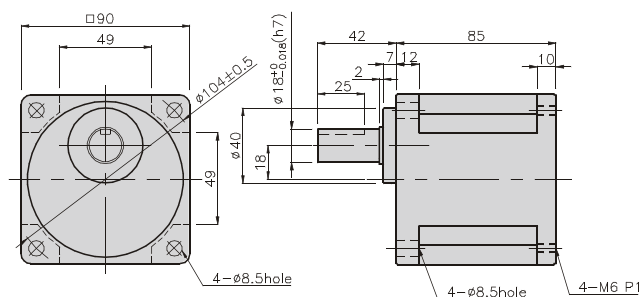
DECIMAL GEARHEAD

K9P10BX



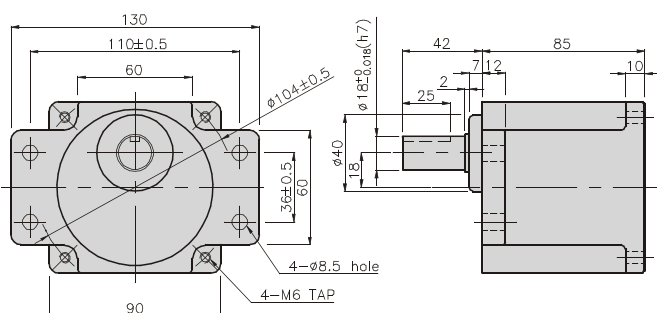
GEARHEAD

K9P□BU

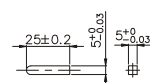


GEARHEAD

K9P□BUF



• KEY



• KEY GROOVE



GEARHEADS

DIMENSIONS

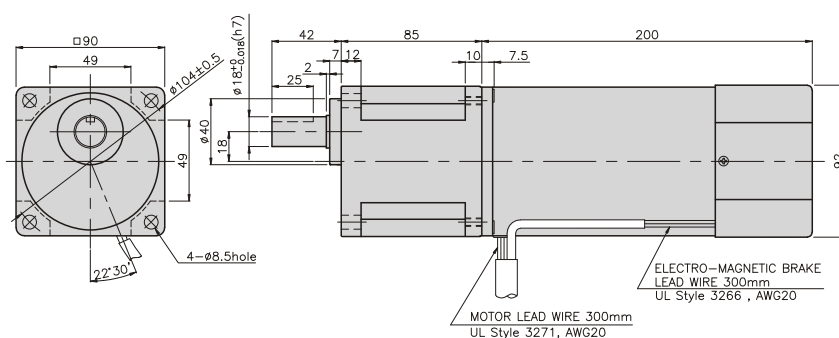
K9□P200F□ + K9P□BU



K9□P200F□ + K9P□BUF



K9IP200F□-B + K9P□BU



WEIGHT

PART	WEIGHT(kg)
MOTOR	4.38
DECIMAL GEAR HEAD	0.62

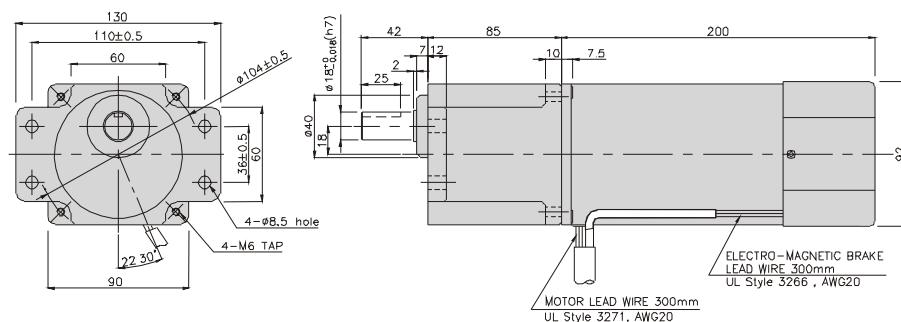
DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	85	K9P3~200BU	M6 P1.0 X 20
02	40	K9P10BX	M6 P1.0 X 60

WEIGHT

PART	WEIGHT(kg)
K9P3~10BU	1.44
K9P12.5~20BU	1.55
K9P25~60BU	1.69
K9P75~200BU	1.74

K9IP200F□-B + K9P□BUF



DIMENSION TABLE

PART No	L	Application Model	Mounting BOLT
01	85	K9P3~200BUF	M6 P1.0 X 20
02	40	K9P10BX	M6 P1.0 X 65

WEIGHT

PART	WEIGHT(kg)
K9P3~10BUF	1.50
K9P12.5~20BUF	1.62
K9P25~60BUF	1.76
K9P75~200BUF	1.82