GGM GGM GEARED MOTOR

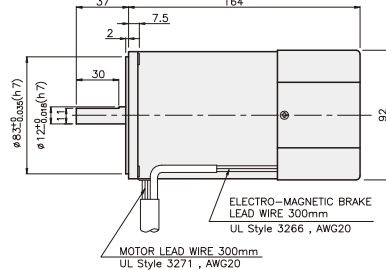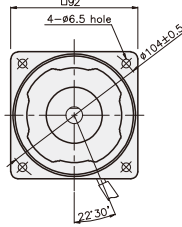## BRAKE MOTOR

60W □90mm

K9□P60F□-B

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	30 minutes	100	50	1,48	0,48/4,8	0,47/4,7	1250	25	1/10
				60	1,66		0,38/3,8	1550		
K9R□60FU−B			110	60	1,25	0,4/4	0,38/3,8	1550	17	1/10
			115		1,31	0,425/4,25				
K9R□60FL−B			200	50	0,72	0,5/5	0,47/4,7	1250	6	1/10
				60	0,76	0,44/4,4	0,39/3,9	1500		
K9R□60FC−B			220	50	0,69	0,45/4,5	0,47/4,7	1250	5	1/10
				60	0,76	0,48/4,8	0,38/3,8	1550		
			230	50	0,77	0,5/5	0,47/4,7	1250		
				60	0,79		0,38/3,8	1550		
K9R□60FD−B			240	50	0,75	0,5/5	0,47/4,7	1250	5	1/10
K9I□60FT−B	three−phase	continuous	200	50	0,49	1,35/13,5	0,45/4,5	1300	−	1/10
				60	0,45	1,05/10,5	0,38/3,8	1550		
K9I□60FH−B			220	50	0,55	1,6/16	0,435/4,35	1350	−	1/10
				60	0,47	1,2/12	0,37/3,7	1600		
			230	50	0,6	1,65/16,5	0,435/4,35	1350		
				60	0,52	1,3/13	0,37/3,7	1600		
K9I□60FM−B			380	50	0,34	1,55/15,5	0,435/4,35	1350	−	1/10
				60	0,25	1,19/11,9	0,37/3,7	1600		
K9I□60FV−B			400	50	0,37	1,85/18,5	0,435/4,35	1350	−	1/10
				60	0,28	1,42/14,2	0,37/3,7	1600		
K9I□60FQ−B			415	50	0,26	1,45/14,5	0,45/4,5	1300	−	1/10
				60	0,21	1,15/11,5	0,37/3,7	1600		
K9I□60FZ−B			440	50	0,28	1,6/16	0,45/4,5	1300	−	1/10
				60	0,23	1,25/12,5	0,37/3,7	1600		

* □ : SHAFT SHAPE (S : STRAIGHT, P : PINION) * FH−B which are in end of the model name is UL certified ones.UL FILE NO. E204632
* 3 phase motor for over 380 voltage can't be used with inverter. Motor winding insulation can be damaged.

● 50Hz

unit = above : N·m / below : Kgf·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□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 : Kgf·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□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.
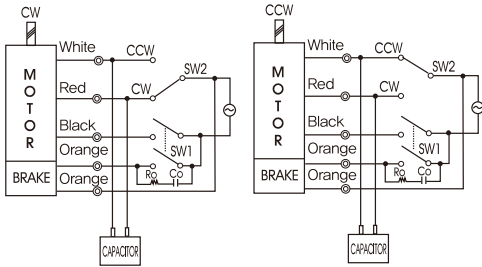* If you are to have less ratio than the ratio in the table, you can install the decimal gearhead, which has one tenth of the ratio, between the gearhead and the motor. In this case, the permissible torque is 20N·m/200kgf·cm.
* RPM is based on motor's synchronous rpm (50HZ:1500rpm, 60HZ:1800rpm) and calculated by dividing gear ratio. Actual rpm is 2∼20% less than indicating rpm according to load size.
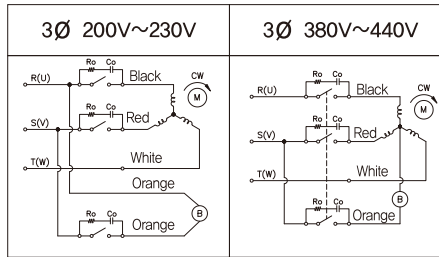
GGM GGM GEARED MOTOR

GEARHEADS

single phase motor

CW

MOTOR
White — CCW
Red — CW — SW2
Black
Orange — SW1
BRAKE — Orange — Ro Co

CAPACITOR

CCW

MOTOR
White — CCW
Red — CW — SW2
Black
Orange — SW1
BRAKE — Orange — Ro Co

CAPACITOR

three phase motor

3Ø 200V~230V	3Ø 380V~440V
R(U) Ro Co Black — CW (M)	R(U) Ro Co Black — CW (M)
S(V) Ro Co Red	S(V) Ro Co Red
T(W) White	T(W) White
Orange	Orange
Ro Co Orange — B	Ro Co Orange — B

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)

DIMENSIONS

K9P☐B

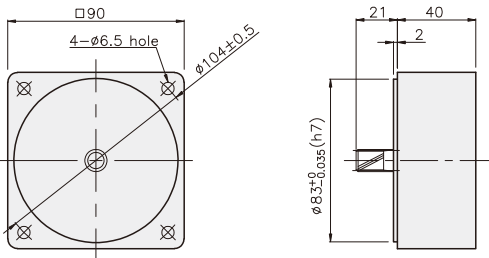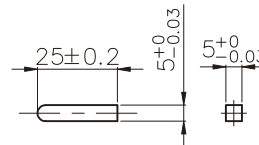### K9P☐BF

BRAKE MOTOR

DECIMAL GEARHEAD

K9P10BX

□90
4−Ø6.5 hole
Ø104±0.5
21 40
2
Ø83$^{+0}_{-0.035}$(h7)

KEY SPEC

● KEY   ● KEY GROOVE

25±0.2   5$^{+0}_{-0.03}$ 5$^{+0}_{-0.03}$

5$^{+0.04}_{-0}$ 3$^{+0.1}_{-0}$

GEARHEAD

K9P☐B

□90
4−Ø6.5 hole
Ø104±0.5
38 65
7
2
25
Ø15$^{+0}_{-0.018}$(h7)
Ø34
18

K9P☐BF

130
110±0.5
60
Ø104±0.5
36±0.5 60
90
4−Ø8.5 hole
4−M6 TAP

38 65
7 12
2
25
11
Ø15$^{+0}_{-0.018}$(h7)
Ø34
18

GGM GGM GEARED MOTOR
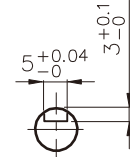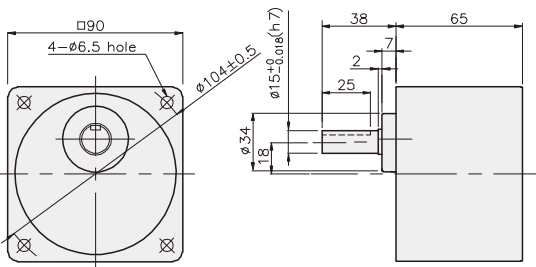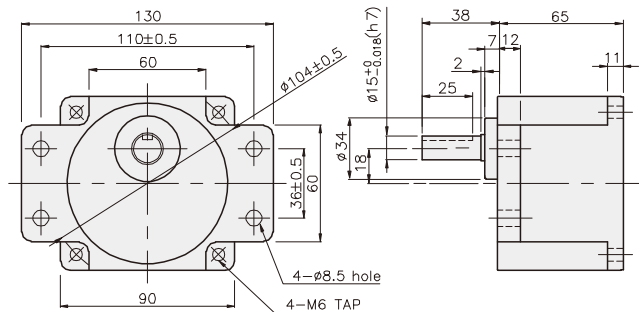
DIMENSIONS

K9□P60F□-B + K9P□B

K9□P60F□-B + K9P□BF

K9□P60F□-B + K9P□B
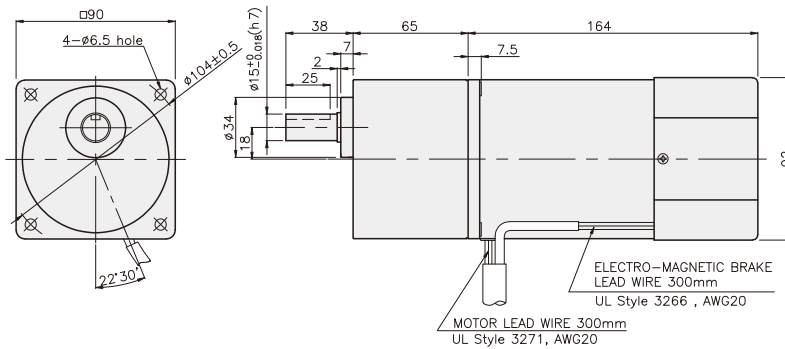
DIMENSION TABLE

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

ELECTRO-MAGNETIC BRAKE
LEAD WIRE 300mm
UL Style 3266 , AWG20

MOTOR LEAD WIRE 300mm
UL Style 3271, AWG20

K9□P60F□-B + K9P□BF
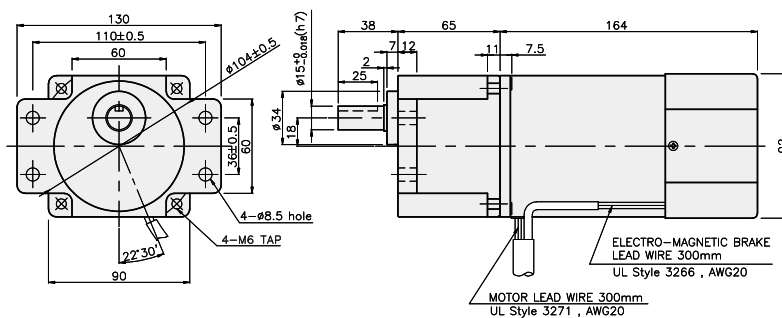
DIMENSION TABLE

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

ELECTRO-MAGNETIC BRAKE
LEAD WIRE 300mm
UL Style 3266 , AWG20

MOTOR LEAD WIRE 300mm
UL Style 3271 , AWG20