

## REVERSIBLE MOTOR

120W

□90mm

LEAD WIRE TYPE  
TERMINAL BOX TYPE

K9RS120F□



K9RS120F□-T, T5



### SPECIFICATIONS

120W 30 minutes rating, four poles

Model	Out Put (W)	Voltage (V)	Frequency (Hz)	Current (A)	Start T. (N·m/kgf·cm)	Rated T. (N·m/kgf·cm)	Speed (rpm)	Condenser (μF)
K9R □120FJ- C50(- T, - T5)	120	100	50	2.4	0.65/6.5	0.9/9	1300	40
K9R □120FJ(- T, - T5)			60	2.61	0.7/7	0.755/7.55	1550	
K9R □120FU(- T, - T5)	120	110	60	1.93	0.6/6	0.755/7.55	1550	25
		115		1.88	0.62/6.2			
K9R □120FL- C50(- T, - T5)	120	200	50	1.07	0.6/6	0.9/9	1300	8.5
K9R □120FL(- T, - T5)			60	1.22	0.58/5.8	0.755/7.55	1550	8
K9R □120FC- C50(- T, - T5)	120	220	50	1.28	0.53/5.3	0.93/9.3	1250	7
		230		1.44	0.58/5.8			
K9R □120FC(- T, - T5)	120	220	60	1	0.63/6.3	0.735/7.35	1600	7
		230		1.1				

single-phase

\* □ : SHAFTS HAPE (S : STRAIGHT, P : PINION)

Models highlighted in Red are stocked at Gapp Automation

### RATED TORQUE OF GEARHEAD

#### ● 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
K9R □120F□(-T, -T5) 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	17.7	20	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	200	200	200	200	200	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
K9R □120F□(-T, -T5) 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	14.5	17.4	19.3	20	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	145	174	193	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/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.

Models highlighted in Red are stocked at Gapp Automation

## GEARHEAD

### RATED TORQUE OF GEARHEAD

#### ● 50Hz

unit = above : N·m / below : Kgf·cm

Model Motor/ Gearhead	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
	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
K9R□120F□(-T,-5) K9P□BU, B UF		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	29,52	30	30	30	30	30	30	30	30
		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	212,6	236,2	295,2	300	300	300	300	300	300	300	300

#### ● 60Hz

unit = above : N·m / below : Kgf·cm

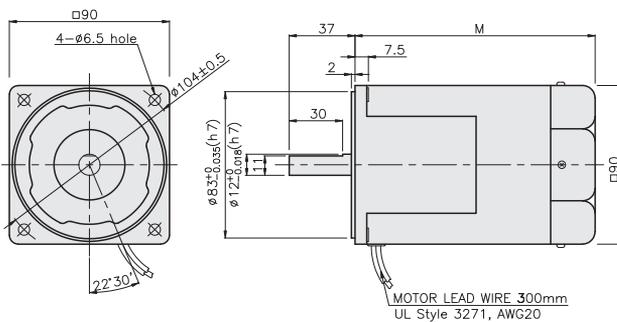
Model Motor/ Gearhead	Speed(rpm)	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
	Ratio	3	3,6	5	6	7,5	9	10	12,5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
K9R□120F□(-T,-5) K9P□BU, B UF		1,79	2,14	2,98	3,57	4,47	5,36	5,95	6,70	8,04	9,64	10,72	12,06	14,47	17,36	19,29	24,11	28,93	30	30	30	30	30	30	30
		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 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.

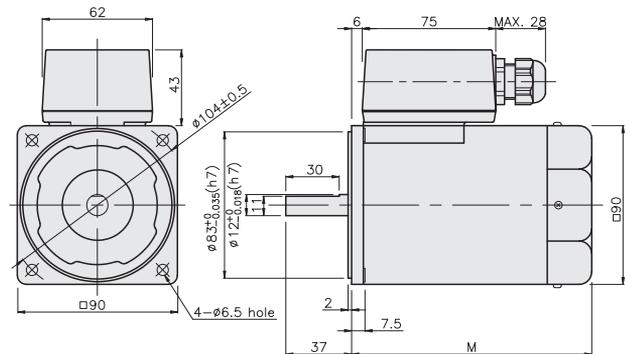
Models highlighted in Red are stocked at Gapp Automation

## DIMENSIONS

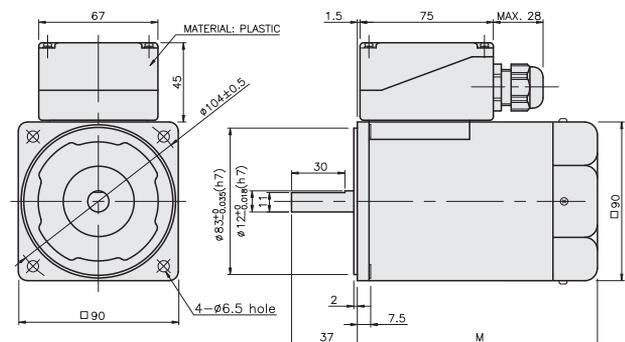
K9RS120F□



K9RS120F□-T



K9RS120F□-T5



DIMENSION TABLE

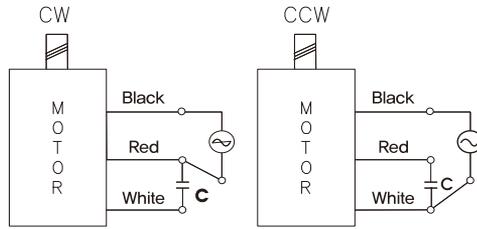
PART No	M	Application Model
K9RS120F□-C50	155	50Hz
K9RS120F□	135	60Hz

※ 50Hz motor is "C50" added to model number.

## GEARHEAD

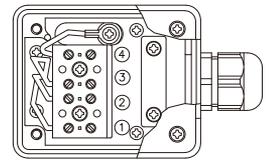
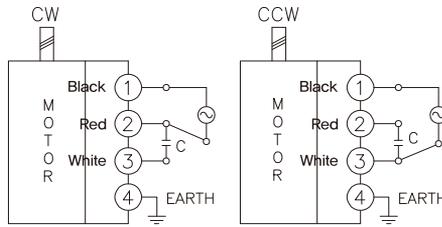
### CONNECTION DIAGRAMS

K9RS120F□



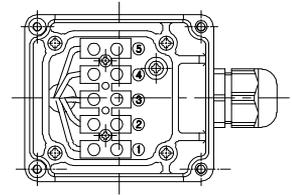
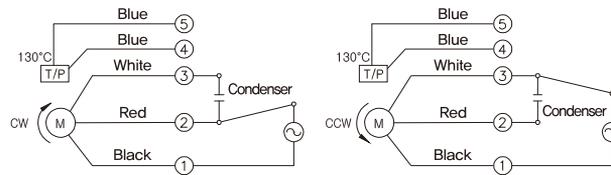
※ The direction of motor rotation is as viewed from the front shaft end of the motor

K9RS120F□-T



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

K9RS120F□-T5



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

## GEARHEAD

### DIMENSIONS

K9P□B



K9P□BF, BUF

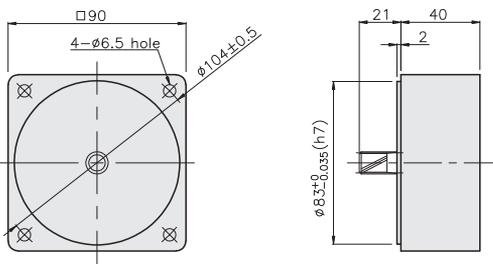


K9P□BU



### DECIMAL GEARHEAD

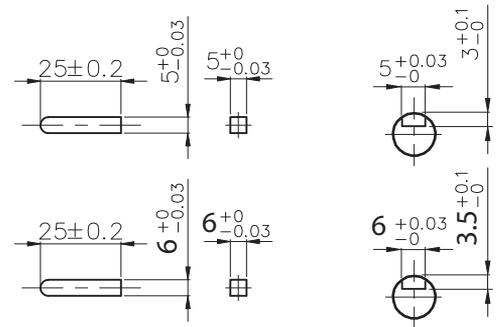
K9P10BX



K9P□B  
K9P□BF

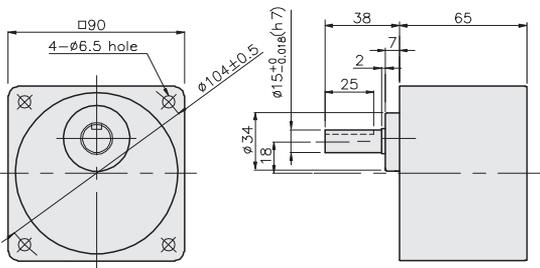
K9P□BU-K6  
K9P□BUF-K6

### KEY SPEC

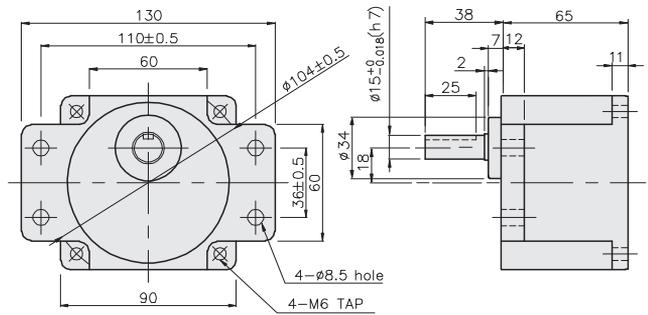


### GEARHEAD

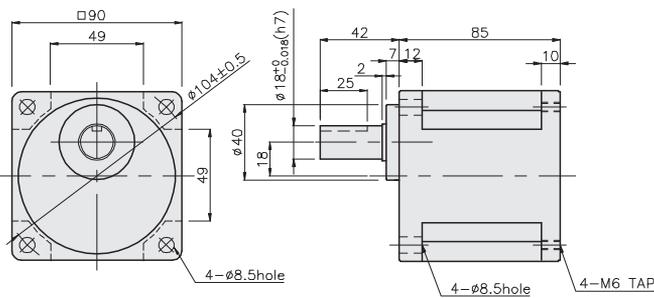
K9P□B



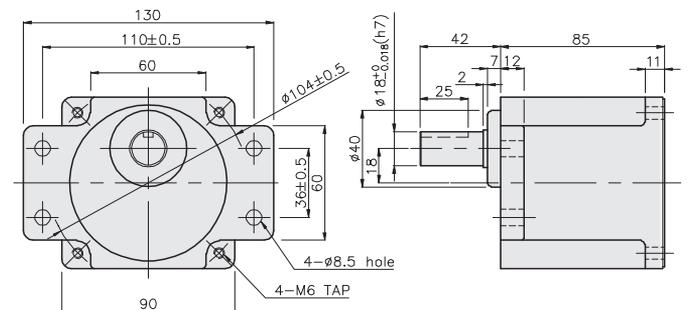
K9P□BF



K9P□BU-K6



K9P□BUF-K6



## GEARHEAD

### DIMENSIONS

K9RP120F□ + K9P□B



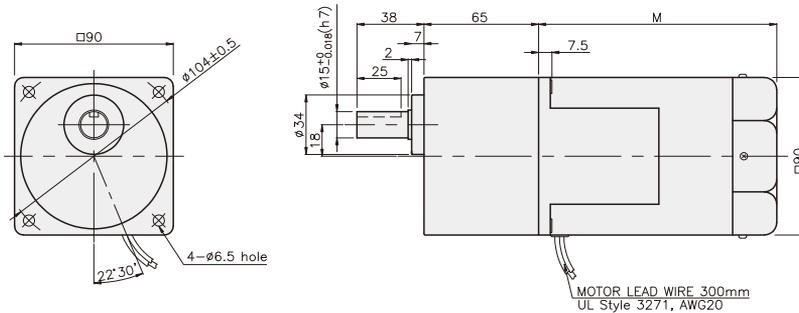
K9RP120F□ + K9P□BF, BUF



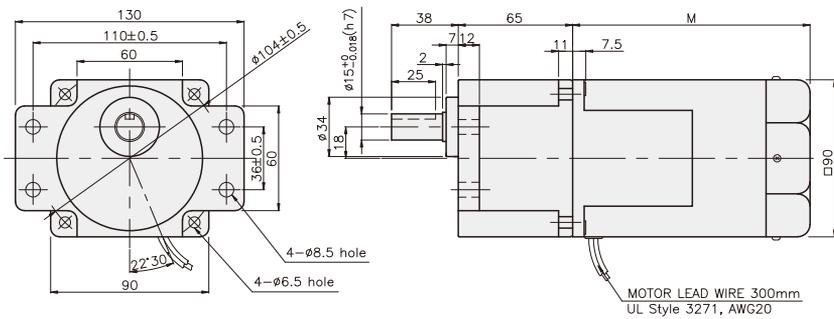
K9RP120F□ + K9P□BU



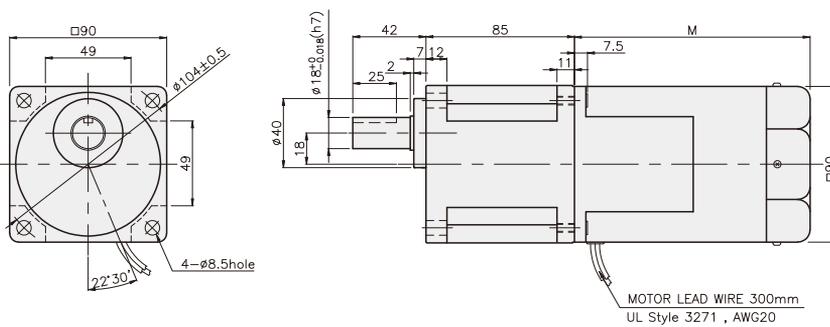
K9RP120F□ + K9P□B



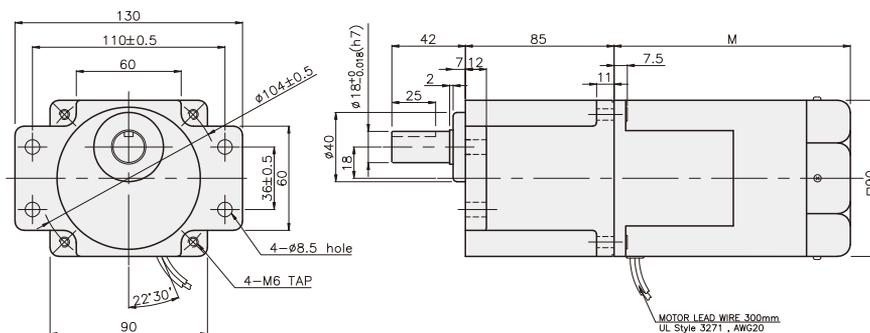
K9RP120F□ + K9P□BF



K9RP120F□ + K9P□BU



K9RP120F□ + K9P□BUF



#### WEIGHT

PART	WEIGHT(kg)
MOTOR	3,72
DECIMAL GEARHEAD	0,62

#### DIMENSION TABLE

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

#### DIMENSION TABLE

PART No	Application Model	Mounting BOLT
01	K9P3~200B	M6 P1,0 X 95
02	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

#### DIMENSION TABLE

PART No	Application Model	Mounting BOLT
01	K9P3~200BF	M6 P1,0 X 20
02	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

#### DIMENSION TABLE

PART No	Application Model	Mounting BOLT
01	K9P3~200BU	M6 P1,0 X 20
02	K9P10BX	M6 P1,0 X 65

#### 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	Application Model	Mounting BOLT
01	K9P3~200BUF	M6 P1,0 X 20
02	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

K9RP120F□ - T + K9P□B



K9RP120F□ - T + K9P□BF, BUF



K9RP120F□ - T + K9P□BU



#### WEIGHT

PART	WEIGHT(kg)
MOTOR	3,90(50Hz)
	3,20(60Hz)
DECIMAL GEARHEAD	0,62

#### DIMENSION TABLE

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

#### DIMENSION TABLE

PART No	Application Model	Mounting BOLT
01	K9P3~200B	M6 P1,0 X 95
02	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

#### DIMENSION TABLE

PART No	Application Model	Mounting BOLT
01	K9P3~200BF	M6 P1,0 X 20
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K9P3~10BF	1,22
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K9P25~60BF	1,42
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#### WEIGHT

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K9P3~10BU	1,44
K9P12,5~20BU	1,55
K9P25~60BU	1,69
K9P75~200BU	1,74

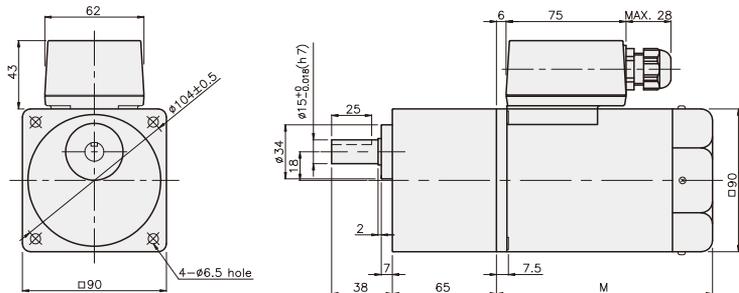
#### DIMENSION TABLE

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

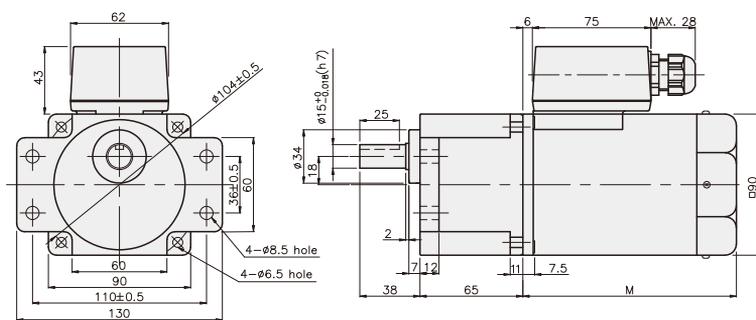
#### WEIGHT

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

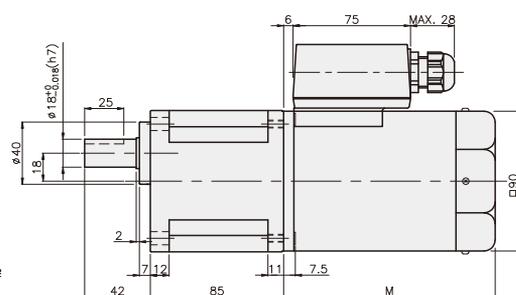
K9RP120F□ - T + K9P□B



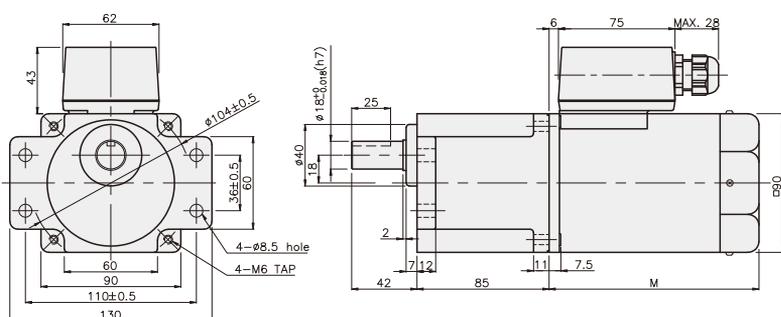
K9RP120F□ - T + K9P□BF



K9RP120F□ - T + K9P□BU



K9RP120F□ - T + K9P□BUF



## GEARHEAD

### DIMENSIONS

K9RP120F□ - T5 + K9P□B



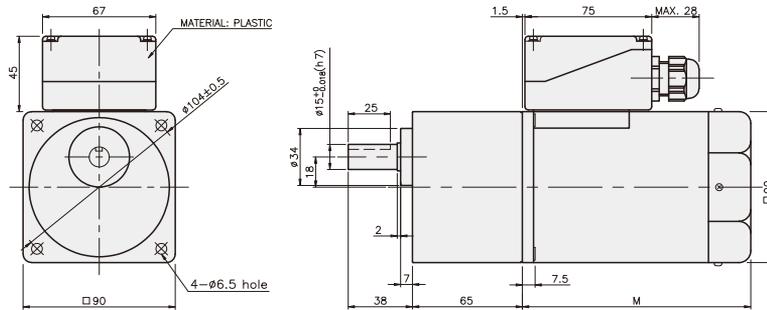
K9RP120F□ - T5 + K9P□BF, BUF



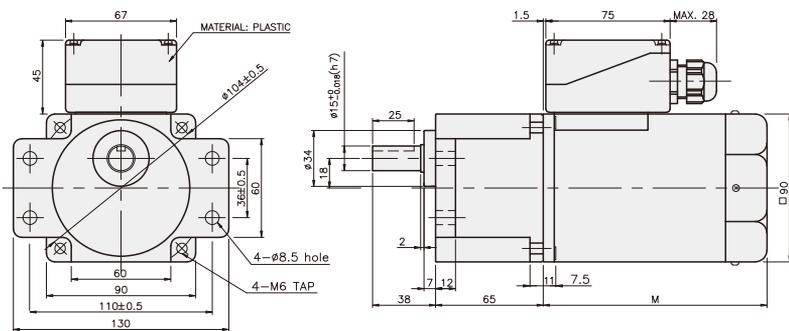
K9RP120F□ - T5 + K9P□BU



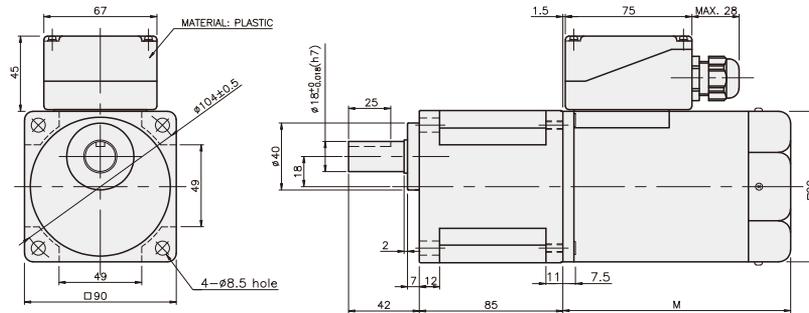
K9RP120F□ - T5 + K9P□B



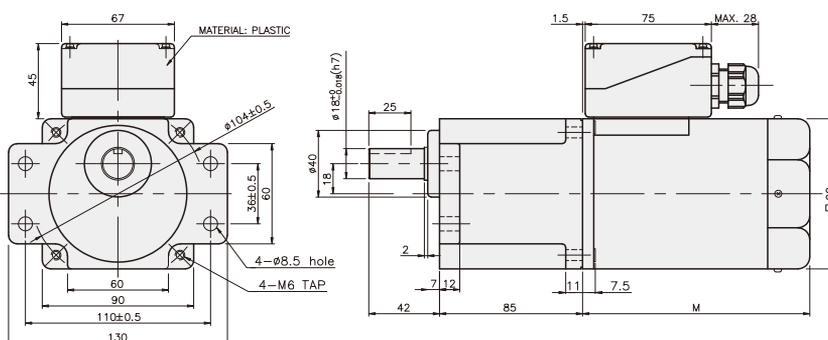
K9RP120F□ - T5 + K9P□BF



K9RP120F□ - T5 + K9P□BU



K9RP120F□ - T5 + K9P□BUF



#### WEIGHT

PART	WEIGHT(kg)
MOTOR	3.90(50Hz)
	3.20(60Hz)
DECIMAL GEARHEAD	0.62

#### DIMENSION TABLE

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

#### DIMENSION TABLE

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

#### WEIGHT

PART	WEIGHT(kg)
K9P3~10B	1.22
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K9P25~60B	1.42
K9P75~200B	1.45

#### DIMENSION TABLE

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01	K9P3~200BF	M6 P1.0 X 20
02	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

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01	K9P3~200BU	M6 P1.0 X 20
02	K9P10BX	M6 P1.0 X 65

#### 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	Application Model	Mounting BOLT
01	K9P3~200BUF	M6 P1.0 X 20
02	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