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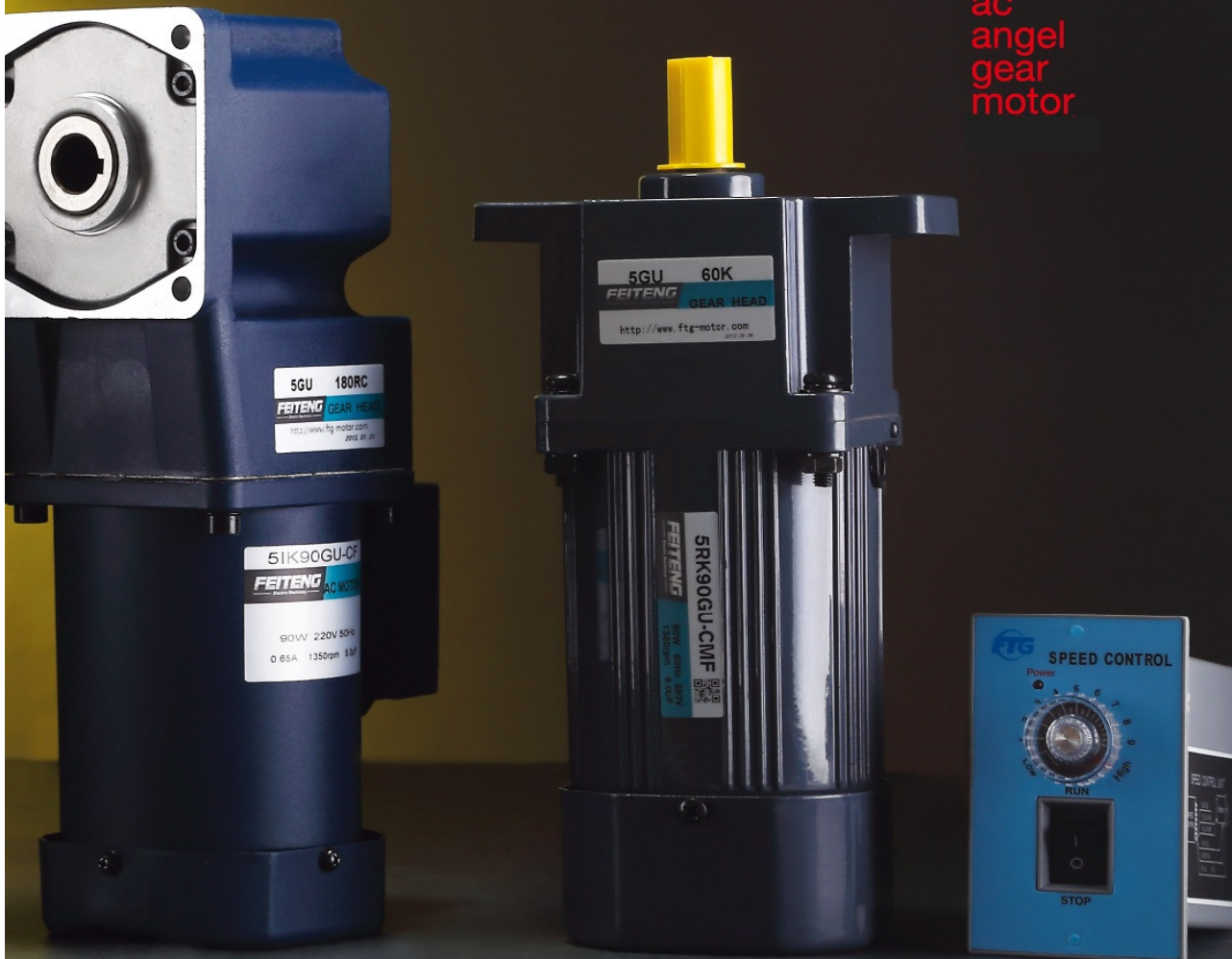


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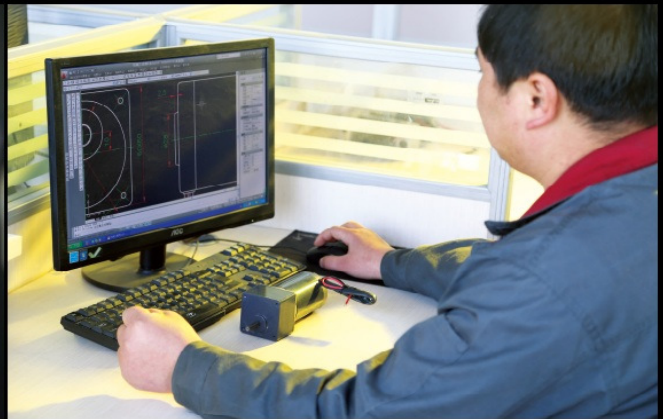


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The equipment is the key to the assurance of the product quality. Under the concept of "always sharpen your tools before you start your work", we introduced a number of advanced equipment to make products scientifically in the all way of the production. The scientific management means a rigorous and orderly operation to make full use of resource and achieve the maximum benefits.



HOW
DO
WE
TRANSFER
AN
IDEAS
INTO
CLIENTS,
MOTORS?
PLEASE
EXPERIENCE
OUR
POWERFUL
MANUFACTURING
STRENGTH.

Trouble shooting for Reducer

Defect cause	Cause analysis	Troubleshooting	
Noise	Gear knocking	Gear surface damaged	Replace damaged gear group
	Continuous noise	Bearing damaged	Replace damaged bearing(s)
	Aging noise	Foreign matter attached to gear surface	Check on the gear surface
	Hissing	Insufficient oil	Add lubricating oil
	Subsequent noise	Unclean lubricating oil	Replace with new lubricating oil
Vibration	Fixed base vibration	Deflection of installation plane	Re-adjust fixed base
	Output shaft vibration	Bearing damaged	Replace damaged bearing(s)
	Internal gear part vibration	Gear damaged	Replac damaged gear
	Body vibration	The installation of gear group is out of condition	Re-adjust gear group
Oil leakage	Oil seal leakage	Oil seal hardening	Replace damaged oil seal
	Body leakage	There is sand hole in zhe body	Replace the body with sand hole
	Joint surface leakage	O-ring damaged	Replace damaged O-ring
Overheating	Oil seal	Over-tightened oil seal	Replace the over-tightened oil seal
	Overheated body	Over-loaded	Re-calculate the load horsepower
	Lack of lubricating oil	Insufficient oil	Add Inbricating oil
75°C			

Trouble shooting for DC Brake

Defect cause	Cause analysis	Troubleshooting
Brakes don't work or work poorly	The power is not supplied	Supply the power
	The lining is worn out	Replace with new lining
	Insufficient power voltage	Supply proper voltage
	Power supplier damaged	Replace with new power supplier
	Intrusion of foreign matter	Clean parts
	Connection fallen off	Connect again
	lining got stuck	Clean parts
	Braking coil burnt	Replace with new braking coil
	Too large clearance	Adjust the clearance
	The lining is tainted with oil	Clean the lining
	Over-loaded	Re-design the load
	Deflection of brake surface	Replace parts
	Too large dscending weighting	Re-design the structure
	Error selection of machine type	Choose the right machine type
	Too high ambient temperature	Better ambient temperature

MODEL DESCRIPTION OF MOTOR AND REDUCER

DESCRIPTION OF MOTOR MODEL

5	I	K	120	GU	-	C	F
Model & Dimension	Motor Type	Motor Series	Output Power	Shape of Motor Shaft	Supply & poles		Other Accessory
2: 60mm 3: 70mm 4: 80mm 5: 90mm 6: 100mm	I: Induction Motor R: Reversible Motor T: Torque Motor	K Series	6: 6W 15: 15W 25: 25W 40: 40W 60: 60W 90: 90W 120: 120W 140: 140W 180: 180W 200: 200W	A: Flat type A1: Milling Keyway GN: General Helical Gear GU: Reinforced Helical Gear	A: Single Phase 100~120V50Hz4P B: Single Phase 100~120V50Hz2P C: Single Phase 220~230V50Hz4P D: Single Phase 220~230V50Hz2P E: Single Phase 100~120V60Hz4P H: Single Phase 200~230V60Hz4P S: Three Phase 220~240V50Hz4P S ₃ : Three Phase 380~415V50Hz4P		F: W/ Fan FF: W/ Independent Fan M: W/ Electromagnetic Brake P: W/ Overheat protector T: W/ Terminal Box

● Note: The suffix "-R" after the output power means speed Adjustable Motor.

DESCRIPTION OF REDUCER MODEL

5	GU	30	K
Model & Dimension	Gear Type	Reduction Ratio	Bearing Type
2: 60mm 3: 70mm 4: 80mm 5: 90mm 6: 100mm	GN: General Helical Gear GU: Reinforced Helical Gear	30: Reduction Ratio 1:30	K: Ball Bearing (Mark KB for Type GU square case)

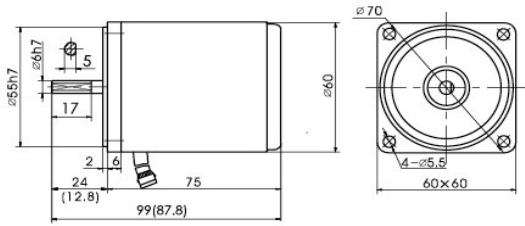
● Note: The code of the non-standard split type is to add "V" before the model number of the motor or reducer (Please specify the detailed parameter requirement in the purchase order).

GENERAL SPECIFICATION OF INDUCTION MOTOR

Items	contents
Insulation resistance	In the circumstance of normal temperature and humidity, the resistance can be up to 100MΩ, measured by DC 500V insulation resistance measurer between the motor wiring and motor shell while the motor is working.
Insulation voltage	In the circumstance of normal temperature and humidity, there will be no problem supplying the power of 1500V 50/60Hz between the metal wiring and motor shell in 1minute while the motor is working.
Temperature rise	The temperature rise of wiring should be lower than 80 °C measured by resistance method when the motor is working. (the temperature of wiring with fan should be lower than 60°C)
Insulation class	Class B (130 °C)
Using temperature	-10 °C~+40 °C (Three phase -10 °C~+50 °C)(No freeze)
Using humidity	≤85% (Place without dew)

DESCRIPTION OF ALLOWABLE TORQUE ON GEARBOX

- The speed reducer is fully closed and immersion lubricated so that grease is not easy to dry. ● □ in the type of gearbox indicates reduction ratio. ● A reliable state-of-the-art "integrated" speed reducer is used, which integrates bearing case and reducer case into one and full ball bearings are used. ● The gray color of the form indicates the same rotating direction of the motor while the rotating direction of others is opposite. ● The conditions of the testing data is under synchronous speed.
- The output shaft speed excludes the motor speed slip. The actual speed will be 2-20% lower than the above value depending upon the load.



The value in the () is the value of small gear shaft motor.

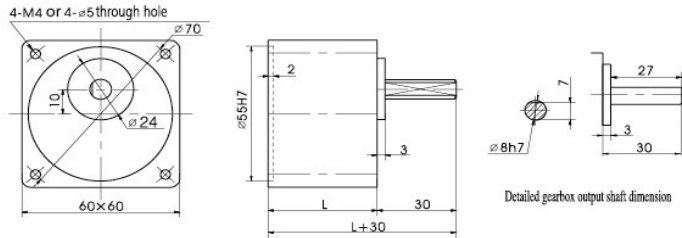


LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/Ve μ F/VAC
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m	
2IK6A-A	2IK6GN-A	6	1ph110	50	4	CONT	1250	0.20	0.05 / 0.45	0.06 / 0.55	3.0/250	
2IK6A-C	2IK6GN-C	6	1ph220	50	4	CONT	1250	0.10	0.05 / 0.45	0.07 / 0.70	0.8/500	
2IK6A-D		6	1ph220	50	2	CONT	2600	0.11	0.02 / 0.21	0.04 / 0.40	0.8/500	

● The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ● Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



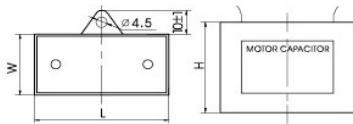
	Reduction Ratio	L(mm)	(kg)
Gearbox	2GN3K-GN18K	32	0.24
	2GN20K-GN50K	42	0.30
	2GN60K-GN200K		0.33
Motor			0.82

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 2GN□K

Frequency	Reduction 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
			50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16
Allowable Torque	N.m	0.13			0.15	0.21	0.26	0.31	0.38	0.42	0.53	0.63	0.76	0.76	0.95	1.14	1.36	1.52	1.72	2.06	2.57	2.94	2.94	2.94
kgf.cm	1.3	1.5		2.1	2.6	3.2	3.9	4.3	5.4	6.4	7.7	7.7	9.7	11.6	13.9	15.5	17.5	21.0	26.2	30.0	30.0	30.0	30.0	
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		Allowable Torque	N.m	0.10	0.13	0.17	0.21	0.26	0.30	0.34	0.43	0.51	0.62	0.62	0.76	0.92	1.11	1.24	1.39	1.67	2.09	2.50	2.78	2.94
	kgf.cm	1.0	1.3	1.7	2.1	2.6	3.1	3.5	4.4	5.2	6.3	6.3	7.8	9.4	11.3	12.6	14.2	17.0	21.3	25.5	28.4	30.0	30.0	

CAPACITOR

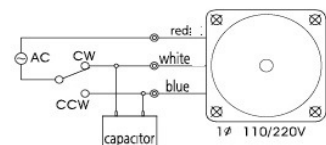


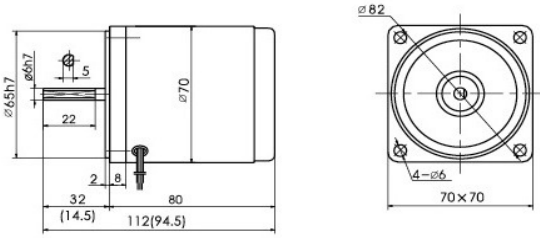
capacity μ F	Voltage V	L \pm 1 mm	W \pm 1 mm	H \pm 1 mm	Type
0.8	500	37	14	28	Down-lead
1.0	500	37	14	28	
3.0	250	49	21	29	
3.5	250	47	22	34	
3.5	250	47	22	34	

Model of Gearbox: 2GN□K

Frequency	Reduction Ratio		180	200
			50Hz	Output Shaft Speed
Allowable Torque	N.m	2.94		
60Hz	Output Shaft Speed	kgf.cm	30.0	30.0
		r/min	10	9
	Allowable Torque	N.m	2.94	2.94
		kgf.cm	30.0	30.0

WIRING DIAGRAM





The value in the () is the value of small gear shaft motor.

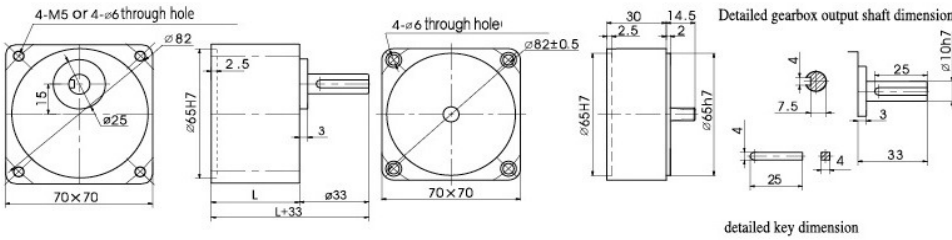


LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/Ve μF/VAC	
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m		kgf.cm
3IK15A-A	3IK15GN-A	15	1ph110	50	4	CONT	1300	0.30	0.11	1.10	0.09	0.09	5.0/250
3IK15A-C	3IK15GN-C	15	1ph220	50	4	CONT	1300	0.14	0.11	1.10	0.10	0.95	1.2/500
3IK15A-D		15	1ph220	50	2	CONT	2750	0.17	0.06	0.55	0.08	0.75	1.5/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



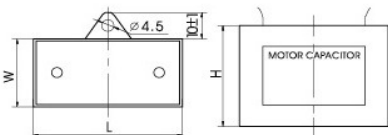
	Reduction Ratio	L(mm)	(kg)
Gearbox	3GN3K-GN15K	32	0.38
	3GN18K-GN50K	42	0.47
	3GN60K-GN200K		0.52
Intermediate Gearbox	3GN10X	30	0.38
Motor			1.10

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 3GN□K

Frequency	Reduction 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
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		N.m	0.31	0.38	0.53	0.64	0.79	0.95	1.06	1.32	1.59	1.90	1.90	2.37	2.85	3.42	3.81	4.28	4.90	4.90	4.90	4.90	4.90	4.90
	Allowable Torque	kgf.cm	3.2	3.9	5.4	6.5	8.1	9.7	10.8	13.5	16.2	19.4	19.4	24.2	29.1	31.9	38.8	43.6	50.0	50.0	50.0	50.0	50.0	50.0
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		N.m	0.29	0.35	0.50	0.60	0.75	0.89	0.99	1.25	1.49	1.79	1.79	2.24	2.68	3.22	3.58	4.02	4.83	4.90	4.90	4.90	4.90	4.90
	Allowable Torque	kgf.cm	3.0	3.6	5.1	6.1	7.6	9.1	10.1	12.7	15.2	18.2	18.2	22.8	27.3	32.8	36.5	41.0	49.2	50.0	50.0	50.0	50.0	50.0

CAPACITOR

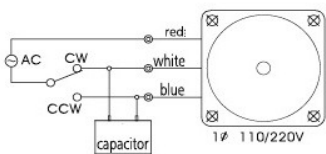


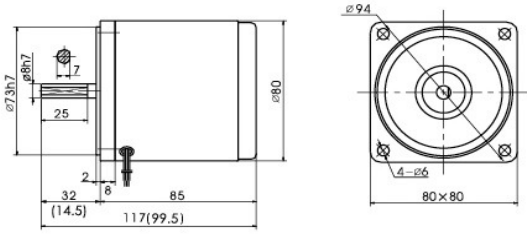
capacity μF	Voltage	L±1	W±1	H±1	Type
Allowable Deviations±5%	V	mm	mm	mm	Down-lead
1.2	500	37	14	28	
1.5	500	37	14	28	
5.0	250	47	23	36	

Model of Gearbox: 3GN□K

Frequency	Reduction Ratio		180	200
50Hz	Output Shaft Speed	r/min	8	7.5
		N.m	4.90	4.90
	Allowable Torque	kgf.cm	50.0	50.0
60Hz	Output Shaft Speed	r/min	10	9
	Allowable Torque	kgf.cm	50.0	50.0

WIRING DIAGRAM





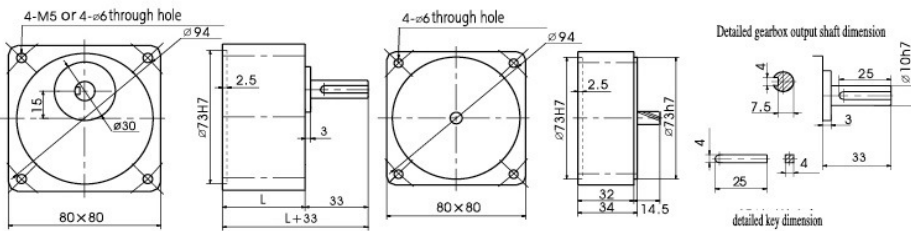
● The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/We μ F/VAC	
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m		kgf.cm
4IK25A-A	4IK25GN-A	25	1ph110	50	4	CONT	1350	0.45	0.18	1.80	0.18	1.80	7.0/250
4IK25A-C	4IK25GN-C	25	1ph220	50	4	CONT	1350	0.24	0.18	1.80	0.18	1.80	1.8/500
4IK25A-S	4IK25GN-S	25	3ph220	50	4	CONT	1300	0.25	0.19	1.88	0.19	1.88	/
4IK25A-S _s	4IK25GN-S _s	25	3ph380	50	4	CONT	1300	0.14	0.19	1.88	0.19	1.88	/
4IK25A-D		25	1ph220	50	2	CONT	2700	0.28	0.09	0.90	0.09	0.90	2.5/500

● The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ● Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX

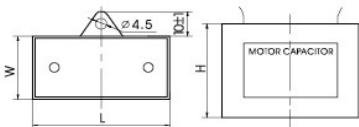


	Reduction Ratio	L(mm)	(kg)
Gearbox	4GN3K-GN20K	32	0.43
	4GN25K-GN50K	43.5	0.57
	4GN60K-GN200K		0.61
Intermediate Gearbox	4GN10X	32	0.43
Motor			1.56

ALLOWABLE TORQUE ON GEARBOX

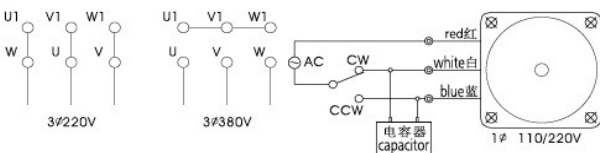
Frequency	Reduction Ratio	Reduction Ratio																						
		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	0.42	0.52	0.72	0.86	1.07	1.29	1.43	1.79	2.15	2.58	2.87	3.22	3.87	4.65	5.16	6.45	7.00	7.84	7.84	7.84	7.84	7.84
		kgf.cm	4.28	5.3	7.35	8.77	10.9	13.2	14.6	18.3	21.9	26.3	29.3	32.9	39.5	47.4	52.7	65.8	71.4	80.0	80.0	80.0	80.0	80.0
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	0.35	0.42	0.59	0.70	0.88	1.05	1.17	1.46	1.76	2.11	2.34	2.64	3.17	3.80	4.22	5.28	5.73	7.16	7.84	7.84	7.84	7.84
		kgf.cm	3.59	4.30	5.98	7.20	8.97	10.8	12.0	14.9	17.9	21.5	23.9	26.9	32.3	38.8	43.1	53.9	58.8	73.1	80.0	80.0	80.0	80.0

CAPACITOR



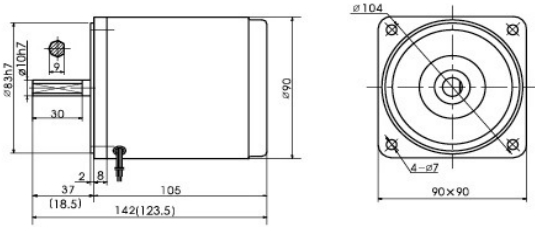
Capacity μ F	Voltage V	L \pm 1 mm	W \pm 1 mm	H \pm 1 mm	Type	
Allowable Deviation \pm 5%	1.8	500	38	15	28	Down-lead
	2.5	500	38	18	29	
	7.0	250	47	23	36	

WIRING DIAGRAM



Model of Gearbox: 4GN□K

Frequency	Reduction Ratio	Reduction Ratio			
		180	200	250	
50Hz	Output Shaft Speed	r/min	8	7.5	6
	Allowable Torque	kgf.cm	80.0	80.0	80.0
60Hz	Output Shaft Speed	r/min	10	9	7.2
	Allowable Torque	kgf.cm	80.0	80.0	80.0



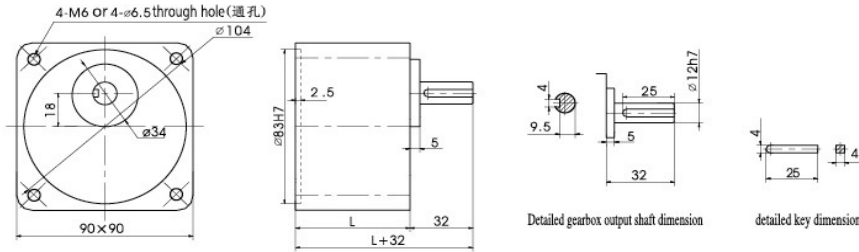
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output	Voltage	Frequency	Poles	Duty	Rated			Starting Torque		Capacitor/Ve	
Motor	Motor with gear shaft	W	V	Hz	P		Speed	Current	Torque	N.m	kgf.cm	μF/VAC	
							r/min	A	N.m				kgf.cm
5IK40A-A	5IK40GN-A	40	1ph110	50	4	CONT	1350	0.64	0.29	2.85	0.25	2.50	10.0/250
5IK40A-C	5IK40GN-C	40	1ph220	50	4	CONT	1350	0.32	0.29	2.85	0.28	2.50	2.5/500
5IK40A-S	5IK40GN-S	40	3ph220	50	4	CONT	1300	0.38	0.29	2.90	1.15	11.5	/
5IK40A-Ss	5IK40GN-Ss	40	3ph380	50	4	CONT	1300	0.22	0.29	2.90	1.15	11.5	/
5IK40A-D		40	1ph220	50	2	CONT	2800	0.35	0.15	1.45	0.13	1.25	3.0/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX

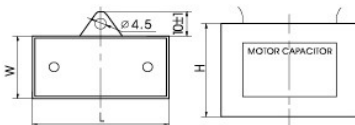


	Reduction Ratio	L(mm)	(kg)
Gearbox	5GN3K-GN15K	42	0.73
	5GN18K-GN36K	60	1.03
	5GN40K-GN200K		1.13
Motor			2.34

ALLOWABLE TORQUE ON GEARBOX

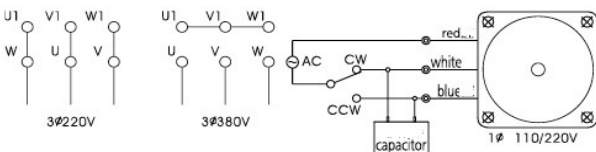
Frequency	Reduction Ratio	r/min	Reduction Ratio																					
			3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		N.m	0.68	0.82	1.14	1.37	1.72	2.06	2.29	2.86	3.43	4.13	4.59	5.16	6.20	7.44	8.26	9.80	9.80	9.80	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	6.94	8.37	11.6	14.0	17.6	21.0	23.4	29.2	35.0	42.1	46.8	52.6	63.3	75.9	84.3	100	100	100	100	100	100	100
		N.m	0.58	0.70	0.97	1.16	1.45	1.74	1.93	2.41	2.90	3.48	3.87	4.36	5.23	6.28	6.97	8.72	9.46	9.80	9.80	9.80	9.80	9.80
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		N.m	0.58	0.70	0.97	1.16	1.45	1.74	1.93	2.41	2.90	3.48	3.87	4.36	5.23	6.28	6.97	8.72	9.46	9.80	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	5.92	7.14	9.90	11.8	10.8	17.7	19.7	24.6	29.6	35.5	39.5	44.5	53.4	64.1	71.1	89.0	96.5	100	100	100	100	100
		N.m	0.58	0.70	0.97	1.16	1.45	1.74	1.93	2.41	2.90	3.48	3.87	4.36	5.23	6.28	6.97	8.72	9.46	9.80	9.80	9.80	9.80	9.80

CAPACITOR



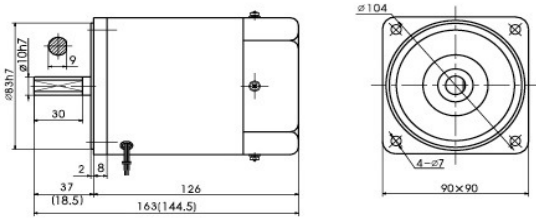
capacity μF	Voltage V	L±1 mm	W±1 mm	H±1 mm	Type
2.5	500	38	18	29	Down-lead
3.0	500	47	18	32	
10.0	250	58	23	39	
10.0	250	58	23	39	

WIRING DIAGRAM



Model of Gearbox: 5GN□K

Frequency	Reduction Ratio		Reduction Ratio			
			180	200	300	500
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
		N.m	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	100	100	100	100
		N.m	9.80	9.80	9.80	9.80
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
	Allowable Torque	kgf.cm	100	100	100	100



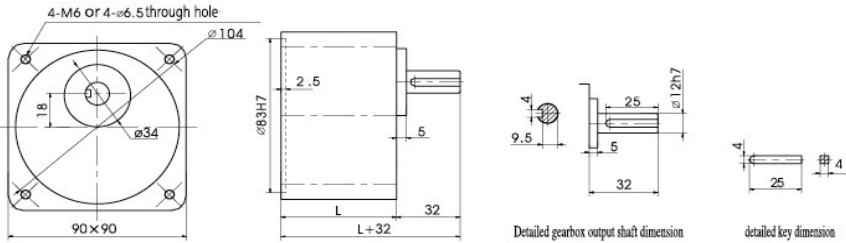
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/Ve μ F/VAC	
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m kgf.cm	N.m	kgf.cm		
5IK60A-AF	5IK60GN-AF	60	1ph110	50	4	CONT	1350	0.98	0.44	4.40	0.38	3.75	15.0/250
5IK60A-CF	5IK60GN-CF	60	1ph220	50	4	CONT	1350	0.52	0.44	4.40	0.40	4.00	4.0/500
5IK60A-SF	5IK60GN-SF	60	3ph220	50	4	CONT	1350	0.49	0.46	4.55	1.70	17.0	/
5IK60A-S ₃ F	5IK60GN-S ₃ F	60	3ph380	50	4	CONT	1350	0.28	0.46	4.55	1.70	17.0	/
5IK60A-DF		60	1ph220	50	2	CONT	2750	0.56	0.21	2.10	0.25	2.50	4.0/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX

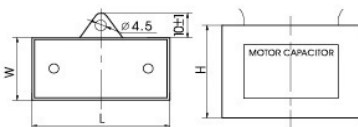


	Reduction Ratio	L(mm)	(kg)
Gearbox	5GN3K-GN15K	42	0.73
	5GN18K-GN36K	60	1.03
	5GN40K-GN200K		1.13
Motor			2.69

ALLOWABLE TORQUE ON GEARBOX

Frequency	Reduction Ratio		Reduction 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
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		N.m	1.03	1.24	1.72	2.6	2.58	3.10	3.10	3.88	4.65	5.38	5.60	7.01	8.41	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	10.5	12.7	17.6	21.0	26.3	31.6	31.6	39.6	47.4	54.9	57.1	71.6	85.8	100	100	100	100	100	100	100	100	100
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		N.m	0.9	1.08	1.50	1.80	2.23	2.70	2.70	3.38	4.05	4.88	4.88	6.10	7.33	8.97	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	9.18	11.0	15.3	18.4	23.0	27.6	27.6	34.5	41.3	49.5	49.5	62.2	74.7	90.0	100	100	100	100	100	100	100	100

CAPACITOR

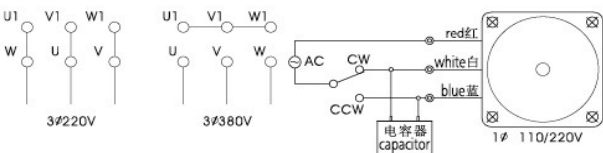


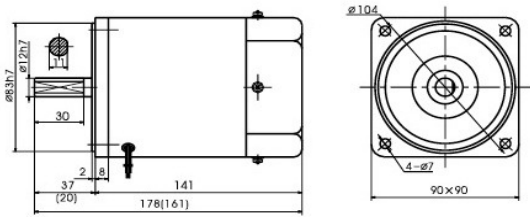
capacity μ F	Voltage V	L ± 1 mm	W ± 1 mm	H ± 1 mm	Type
4.0	500	49	21	29	Down-lead
15.0	250	58	25	45	

Model of Gearbox: 5GN□K

Frequency	Reduction Ratio		180	200	300	500
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
		N.m	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	100	100	100	100
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
		N.m	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	100	100	100	100

WIRING DIAGRAM





● The value in the () is the value of small gear shaft motor.

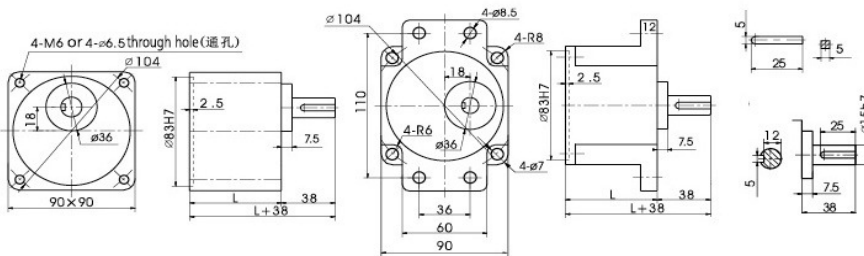


LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/ve μ F/VAC	
							Speed r/min	Current A	Torque N.m kgf.cm	N.m	kgf.cm		
5IK90A-AF	5IK90GU-AF	90	1ph110	50	4	CONT	1350	1.40	0.64	6.40	0.50	5.00	20.0/250
5IK90A-CF	5IK90GU-CF	90	1ph220	50	4	CONT	1350	0.59	0.64	6.40	0.48	4.80	5.0/500
5IK90A-SF	5IK90GU-SF	90	3ph220	50	4	CONT	1300	0.66	0.66	6.60	2.40	24.0	/
5IK90A-SsF	5IK90GU-SsF	90	3ph380	50	4	CONT	1300	0.28	0.66	6.60	2.40	24.0	/
5IK90A-DF		90	1ph220	50	2	CONT	2800	0.79	0.30	3.00	0.34	3.40	6.0/500

● The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ● Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

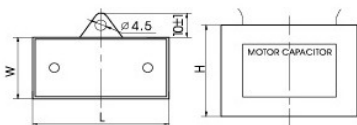
OVERALL DIMENSION OF GEARBOX



ALLOWABLE TORQUE ON GEARBOX

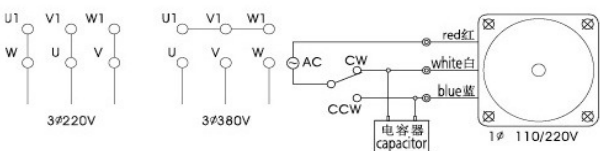
Frequency	Reduction Ratio	Reduction Ratio																						
		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	1.55	1.86	2.58	3.10	3.87	4.64	4.65	5.81	6.98	8.37	8.40	10.5	12.6	15.1	16.8	19.6	19.6	19.6	19.6	19.6	19.6	19.6
		kgf.cm	15.8	19.0	29.2	31.6	39.6	47.2	47.4	59.3	71.2	85.4	85.7	107	129	154	171	200	200	200	200	200	200	200
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	1.35	1.62	2.25	2.70	3.37	4.04	4.05	5.06	6.07	7.29	7.32	9.15	11.0	13.2	14.6	18.3	19.6	19.6	19.6	19.6	19.6	19.6
		kgf.cm	13.8	16.5	23.0	27.6	34.4	41.2	41.3	51.6	61.9	74.4	74.7	93.4	112	135	149	187	200	200	200	200	200	200

CAPACITOR

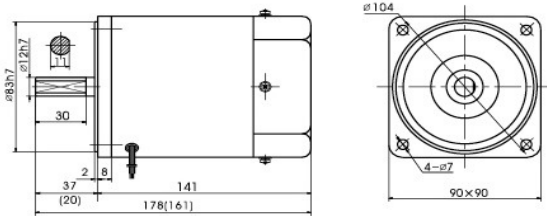


capacity μ F	Voltage	L \pm 1	W \pm 1	H \pm 1	Type	
						V
Allowable Deviations \pm 5%	5.0	500	47	23	36	Down-lead
	6.0	500	47	23	36	
	20.0	250	58	23	39	

WIRING DIAGRAM



Frequency	Reduction Ratio	Reduction Ratio				
		180	200	300	500	
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
	Allowable Torque	N.m	19.6	19.6	19.6	19.6
		kgf.cm	200	200	200	200
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
	Allowable Torque	N.m	19.6	19.6	19.6	19.6
		kgf.cm	200	200	200	200



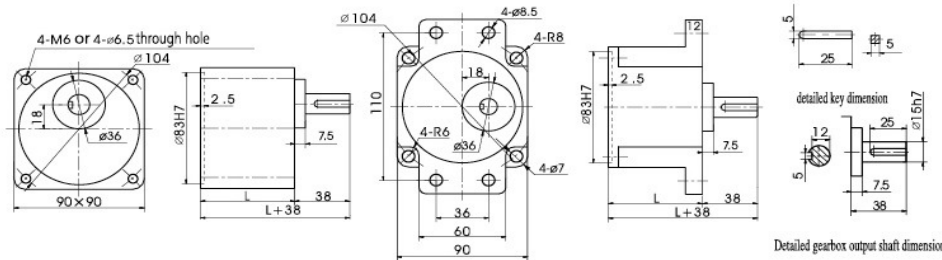
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/Ve	
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m	kgf.cm	μF/VAC
5IK120A-AF	5IK120GU-AF	120	1ph110	50	4		CONT	1250	1.80	0.90	9.00	0.65	6.50
5IK120A-CF	5IK120GU-CF	120	1ph220	50	4	CONT	1300	0.82	0.87	8.65	0.75	7.50	7.0/500
5IK120A-SF	5IK120GU-SF	120	3ph220	50	4	CONT	1300	0.83	0.87	8.65	3.20	32.00	/
5IK120A-SsF	5IK120GU-SsF	120	3ph380	50	4	CONT	1300	0.40	0.87	8.65	3.20	32.00	/
5IK120A-DF		120	1ph220	50	2	CONT	2800	1.20	0.40	4.00	0.51	5.05	8.0/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



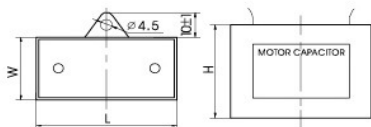
	Reduction Ratio	L(mm)	(kg)
Gearbox	5GU3K-GU9K	65	1.21
	5GU10K-GU18K		1.30
	5GU20K-GU75K		1.40
	5GU90K-GU200K		1.45
	5GU300K-GU500K		
Motor			3.43

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 5GU□K

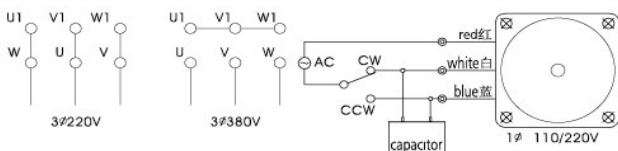
Frequency	Reduction Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	2.14	2.57	3.57	4.29	5.38	6.43	6.43	8.05	9.66	11.6	11.6	14.6	17.5	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	1.80	2.16	3.00	3.60	4.49	5.39	5.39	6.75	8.10	9.72	9.72	12.2	14.6	17.6	19.5	19.6	19.6	19.6	19.6	19.6	19.6	19.6
		kgf.cm	18.4	22.0	30.6	36.7	45.8	55.0	55.0	68.9	82.7	99.2	99.2	124	149	180	199	200	200	200	200	200	200	200

CAPACITOR



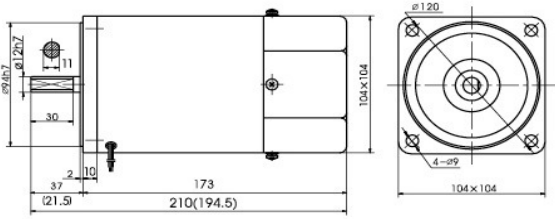
capacity μF	Voltage	L±1	W±1	H±1	Type	
Allowable deviation: ±5%	7.0	500	47	23	36	Down-lead
	8.0	500	47	26	39	
	20.0	250	58	23	39	

WIRING DIAGRAM



Model of Gearbox: 5GU□K

Frequency	Reduction Ratio	180	200	300	500	
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
	Allowable Torque	N.m	19.6	19.6	19.6	19.6
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
	Allowable Torque	N.m	19.6	19.6	19.6	19.6
		kgf.cm	200	200	200	200



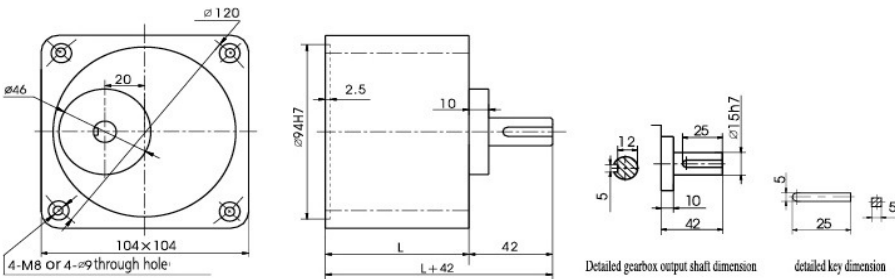
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/Ve μF/VAC	
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m		kgf.cm
6IK140A-AF	6IK140GU-AF	140	1ph110	50	4	CONT	1350	2.00	0.99	9.95	0.90	9.00	30.0/250
6IK140A-CF	6IK140GU-CF	140	1ph220	50	4	CONT	1350	0.91	0.99	9.95	0.90	9.00	10.0/500
6IK140A-SF	6IK140GU-SF	140	3ph220	50	4	CONT	1350	0.95	0.99	9.95	3.50	35.00	/
6IK140A-SsF	6IK140GU-SsF	140	3ph380	50	4	CONT	1350	0.55	0.99	9.95	3.50	35.00	/
6IK140A-DF		140	1ph220	50	2	CONT	2800	0.88	0.45	4.50	0.44	4.40	10.0/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



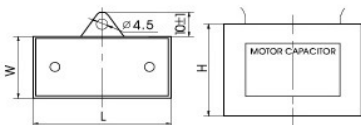
	Reduction Ratio	L(mm)	(kg)
Gearbox	6GU3K-GU9K	72	1.87
	6GU10K-GU18K		2.10
	6GU20K-GU200K		2.75
Motor			4.94

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 6GU□K

Frequency	Reduction 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
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	2.36	2.83	3.93	4.71	5.89	7.07	7.07	8.85	10.6	12.7	12.7	16.0	19.2	23.0	25.6	32.0	38.4	39.2	39.2	39.2	39.2	39.2
		kgf.cm	24.1	28.8	40.1	48.1	60.1	72.1	72.1	90.3	108	130	130	163	196	235	261	327	392	400	400	400	400	400
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	2.03	2.44	3.39	4.06	5.08	6.09	6.09	7.60	9.15	11.0	11.0	13.8	16.6	19.9	22.1	27.6	33.1	39.2	39.2	39.2	39.2	39.2
		kgf.cm	20.7	24.9	34.6	41.2	51.8	62.1	62.1	77.6	93.4	112	112	141	169	203	226	282	338	400	400	400	400	400

CAPACITOR

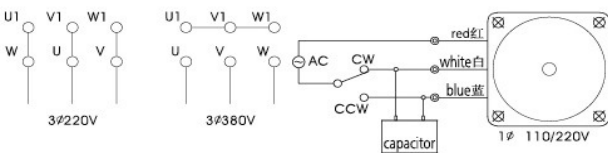


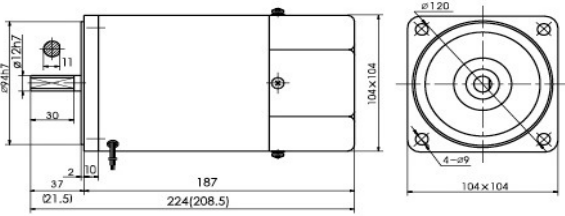
capacity μF	Voltage	L±1	W±1	H±1	Type	
Allowable Deviation±5%	V	mm	mm	mm	Down-lead	
	10.0	500	47	26		38
	30.0	250	68	32		56

Model of Gearbox: 6GU□K

Frequency	Reduction Ratio		180	200
50Hz	Output Shaft Speed	r/min	8	7.5
	Allowable Torque	N.m	39.2	39.2
60Hz	Output Shaft Speed	r/min	10	9
	Allowable Torque	kgf.cm	400	400

WIRING DIAGRAM





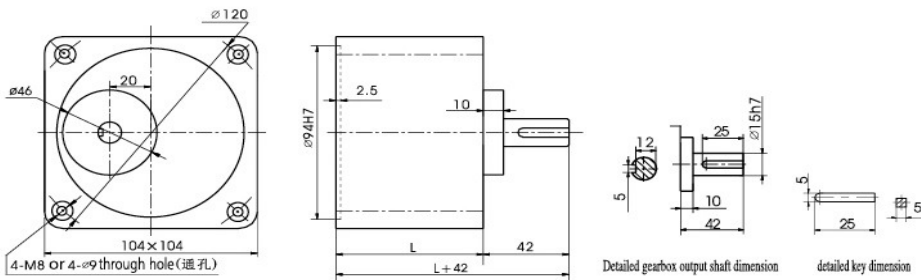
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/Ve μF/VAC	
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m kgf.cm	N.m	kgf.cm		
6IK180A-AF	6IK180GU-AF	180	1ph110	50	4	CONT	1350	2.30	1.25	12.5	1.20	12.00	35.0/250
6IK180A-CF	6IK180GU-CF	180	1ph220	50	4	CONT	1350	1.17	1.25	12.5	1.20	12.00	12.0/500
6IK180A-SF	6IK180GU-SF	180	3ph220	50	4	CONT	1350	0.95	1.25	12.5	4.60	46.00	/
6IK180A-SsF	6IK180GU-SsF	180	3ph380	50	4	CONT	1350	0.55	1.25	12.5	4.60	46.00	/
6IK180A-DF		180	1ph220	50	2	CONT	2800	0.88	0.45	4.50	0.44	4.40	12.0/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX

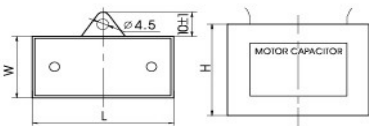


Gearbox	Reduction Ratio	L(mm)	(kg)
	6GU3K-GU9K		
6GU10K-GU18K			2.10
6GU20K-GU200K			2.75
Motor			4.94

ALLOWABLE TORQUE ON GEARBOX

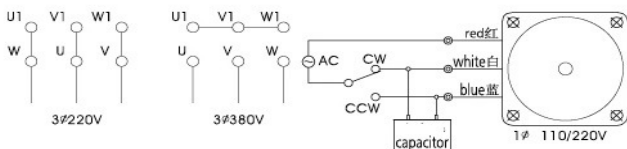
Frequency	Reduction Ratio	Model of Gearbox: 6GU□K																						
		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	2.36	2.83	3.93	4.71	5.89	7.07	7.07	8.85	10.6	12.7	12.7	16.0	19.2	23.0	25.6	32.0	38.4	39.2	39.2	39.2	39.2	39.2
		kgf.cm	24.1	28.8	40.1	48.1	60.1	72.1	72.1	90.3	108	130	130	163	196	235	261	327	392	400	400	400	400	400
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	2.03	2.44	3.39	4.06	5.08	6.09	6.09	7.60	9.15	11.0	11.0	13.8	16.6	19.9	22.1	27.6	33.1	39.2	39.2	39.2	39.2	39.2
		kgf.cm	20.7	24.9	34.6	41.2	51.8	62.1	62.1	77.6	93.4	112	112	141	169	203	226	282	338	400	400	400	400	400

CAPACITOR



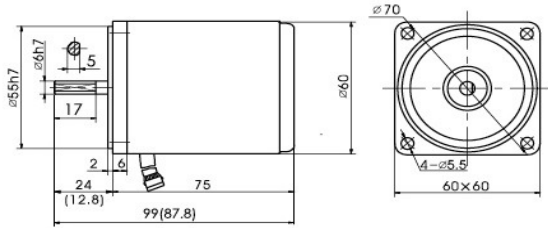
capacity μF	Voltage	L±1	W±1	H±1	Type
Allowable Deviation(±)%	V	mm	mm	mm	
12.0	450	58	23	39	Down-lead
35.0	500	68	32	56	

WIRING DIAGRAM



Model of Gearbox: 6GU□K

Frequency	Reduction Ratio	180		200	
		r/min	8	7.5	N.m
50Hz	Output Shaft Speed				39.2
	Allowable Torque	kgf.cm	400	400	
60Hz	Output Shaft Speed	r/min	10	9	
	Allowable Torque	kgf.cm	39.2	39.2	400



● The value in the () is the value of small gear shaft motor.

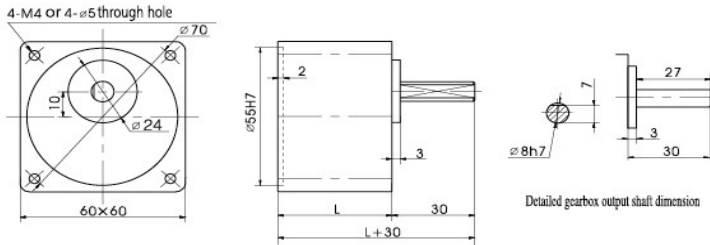


LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/ve	
							Speed r/min	Current A	Torque N.m / kgf.cm		N.m	kgf.cm	μ F/VAC
2RK6A-A	2RK6GN-A	6	1ph110	50	4	CONT	1250	0.20	0.05	0.45	0.06	0.55	3.5/250
2RK6A-C	2RK6GN-C	6	1ph220	50	4	CONT	1250	0.10	0.05	0.45	0.07	0.70	1.0/500

● The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ● Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX

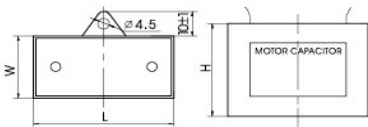


	Reduction Ratio	L(mm)	(kg)
Gearbox	2GN3K-GN18K	32	0.24
	2GN20K-GN50K	42	0.30
	2GN60K-GN200K		0.33
Motor			0.82

ALLOWABLE TORQUE ON GEARBOX

Frequency	Reduction Ratio		Model of Gearbox: 2GN□K																					
			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
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		Allowable Torque	N.m	0.13	0.15	0.21	0.26	0.31	0.38	0.42	0.53	0.63	0.76	0.76	0.95	1.14	1.36	1.52	1.72	2.06	2.57	2.94	2.94	2.94
			kgf.cm	1.3	1.5	2.1	2.6	3.2	3.9	4.3	5.4	6.4	7.7	7.7	9.7	11.6	13.9	15.5	17.5	21.0	26.2	30.0	30.0	30.0
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		Allowable Torque	N.m	0.10	0.13	0.17	0.21	0.26	0.30	0.34	0.43	0.51	0.62	0.62	0.76	0.92	1.11	1.24	1.39	1.67	2.09	2.50	2.78	2.94
			kgf.cm	1.0	1.3	1.7	2.1	2.6	3.1	3.5	4.4	5.2	6.3	6.3	7.8	9.4	11.3	12.6	14.2	17.0	21.3	25.5	28.4	30.0

CAPACITOR

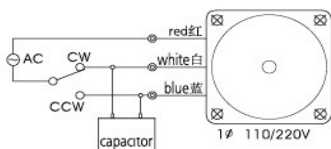


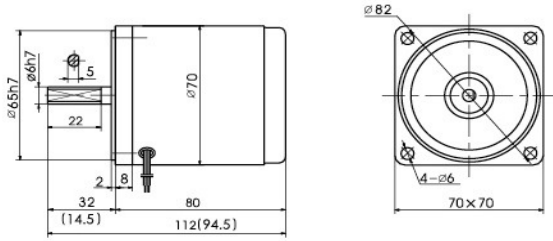
Capacity μ F	Voltage V	L ± 1 mm	W ± 1 mm	H ± 1 mm	Type	
Allowable Deviation: $\pm 5\%$	0.8	500	37	14	28	Down-lead
	1.0	500	37	14	28	
	3.0	250	49	21	29	
	3.5	250	47	22	34	

Model of Gearbox: 2GN□K

Frequency	Reduction Ratio		180		200		
			r/min	8	7.5	N.m	2.94
50Hz	Output Shaft Speed	r/min	8	7.5	N.m	2.94	2.94
		Allowable Torque	kgf.cm	30.0	30.0	kgf.cm	30.0
60Hz	Output Shaft Speed		r/min	10	9	N.m	2.94
		Allowable Torque	kgf.cm	30.0	30.0	kgf.cm	30.0

WIRING DIAGRAM





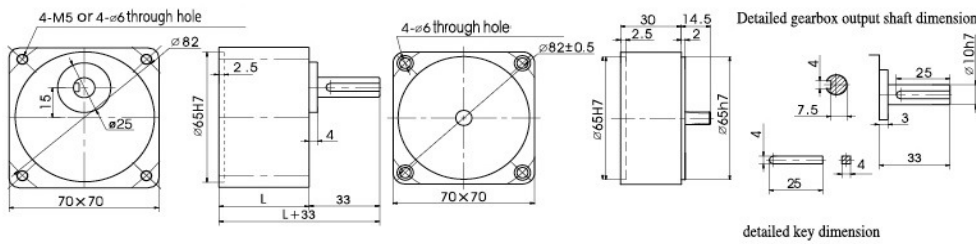
● The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/Ve μ F/VAC
							Speed r/min	Current A	Torque N.m kgf.cm	N.m	kgf.cm	
3RK15A-A	3RK15GN-A	15	1ph110	50	4	30Min	1300	0.32	0.11 0.10	0.12 1.15	6.0/250	
3RK15A-C	3RK15GN-C	15	1ph220	50	4	30Min	1300	0.17	0.11 0.10	0.12 1.20	1.5/500	

● The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ● Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



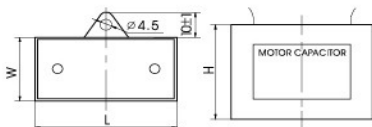
	Reduction Ratio	L(mm)	(kg)
Gearbox	3GN3K-GN15K	32	0.38
	3GN18K-GN50K	43.5	0.47
	3GN60K-GN200K		0.52
Intermediate Gearbox	3GN10X	30	0.38
Motor			1.12

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 3GN□K

Frequency	Reduction Ratio		Model of Gearbox: 3GN□K																					
			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
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		N.m	0.31	0.38	0.53	0.64	0.79	0.95	1.06	1.32	1.59	1.90	1.90	2.37	2.85	3.42	3.81	4.28	4.90	4.90	4.90	4.90	4.90	4.90
	Allowable Torque	kgf.cm	3.2	3.9	5.4	6.5	8.1	9.7	10.8	13.5	16.2	19.4	19.4	24.2	29.1	34.9	38.8	43.6	50.0	50.0	50.0	50.0	50.0	50.0
		r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
60Hz	Output Shaft Speed	N.m	0.29	0.35	0.50	0.60	0.75	0.89	0.99	1.25	1.49	1.79	1.79	2.24	2.68	3.22	3.58	4.02	4.83	4.90	4.90	4.90	4.90	4.90
		kgf.cm	3.0	3.6	5.1	6.1	7.6	9.1	10.1	12.7	15.2	18.2	18.2	22.8	27.3	32.8	36.5	41.0	49.2	50.0	50.0	50.0	50.0	50.0

CAPACITOR

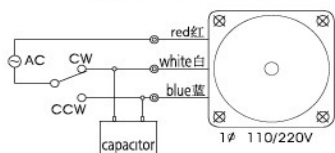


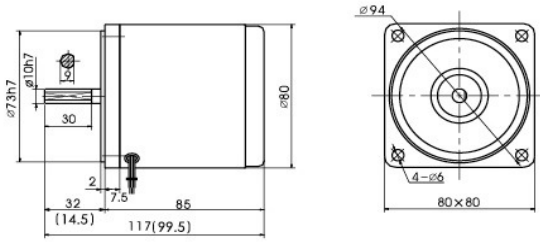
capacity μ F	Voltage	L \pm 1	W \pm 1	H \pm 1	Type
1.8	500	38	14	22	Down-lead
6.0	250	47	23	36	

Model of Gearbox: 3GN□K

Frequency	Reduction Ratio		Model of Gearbox: 3GN□K	
			180	200
50Hz	Output Shaft Speed	r/min	8	7.5
		N.m	4.90	4.90
	Allowable Torque	kgf.cm	50.0	50.0
		r/min	10	9
60Hz	Output Shaft Speed	N.m	4.90	4.90
	Allowable Torque	kgf.cm	50.0	50.0

WIRING DIAGRAM





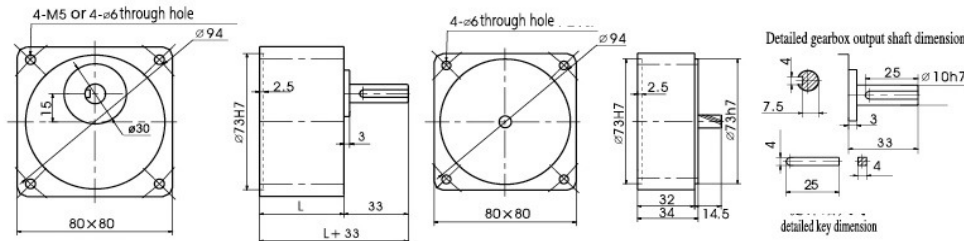
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/Ve	
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m	kgf.cm	μ F/VAC
4RK25A-A	4RK25GN-A	25	1ph110	50	4	30Min	1350	0.42	0.18	1.80	0.17	1.65	8.0/250
4RK25A-C	4RK25GN-C	25	1ph220	50	4	30Min	1350	0.28	0.18	1.80	0.20	2.00	2.0/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



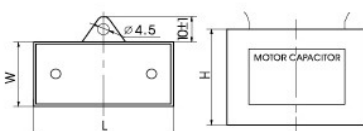
	Reduction Ratio	L(mm)	(kg)
Gearbox	4GN3K-GN20K	32	0.43
	4GN25K-GN50K	43.5	0.57
	4GN60K-GN200K		0.61
Intermediate Gearbox	4GN10X	32	0.43
Motor			1.58

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 4GN□K

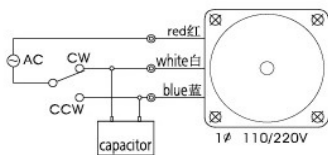
Frequency	Reduction Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	0.42	0.52	0.72	0.86	1.07	1.29	1.43	1.79	2.15	2.58	2.87	3.22	3.87	4.65	5.16	6.45	7.00	7.84	7.84	7.84	7.84	7.84
		kgf.cm	4.28	5.3	7.35	8.77	10.9	13.2	14.6	18.3	21.9	26.3	29.3	32.9	39.5	47.4	52.7	65.8	71.4	80.0	80.0	80.0	80.0	80.0
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	0.35	0.42	0.59	0.70	0.88	1.05	1.17	1.46	1.76	2.11	2.34	2.64	3.17	3.80	4.22	5.28	5.73	7.16	7.84	7.84	7.84	7.84
		kgf.cm	3.59	4.30	5.98	7.20	8.97	10.8	12.0	14.9	17.9	21.5	23.9	26.9	32.3	38.8	43.1	53.9	58.8	73.1	80.0	80.0	80.0	80.0

CAPACITOR



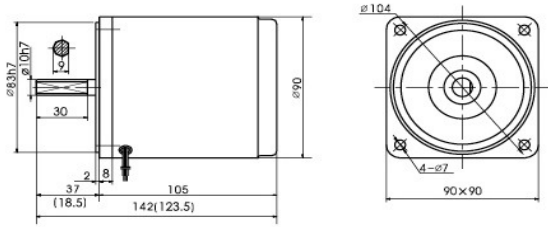
capacity μ F	Voltage	L \pm 1	W \pm 1	H \pm 1	Type
	V	mm	mm	mm	
Allowable Deviation \pm 5%	500	38	15	28	Down-lead
	250	47	23	36	
8.0					

WIRING DIAGRAM



Model of Gearbox: 4GN□K

Frequency	Reduction Ratio		180	200	250
50Hz	Output Shaft Speed	r/min	8	7.5	6
	Allowable Torque	N.m	7.84	7.84	7.84
		kgf.cm	80.0	80.0	80.0
60Hz	Output Shaft Speed	r/min	10	9	7.2
	Allowable Torque	N.m	7.80	7.80	7.80
		kgf.cm	80.0	80.0	80.0



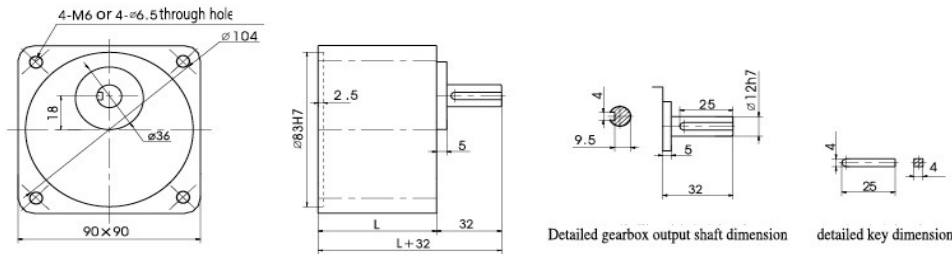
● The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated				Starting Torque		Capacitor/Ve
							Speed r/min	Current A	Torque N.m / kgf.cm		N.m	kgf.cm	μF/VAC
5RK40A-A	5RK40GN-A	40	1ph110	50	4	30Min	1350	0.68	0.29	2.85	0.30	3.00	12.0/250
5RK40A-C	5RK40GN-C	40	1ph220	50	4	30Min	1350	0.35	0.29	2.85	0.30	3.00	3.0/500

● The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ● Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



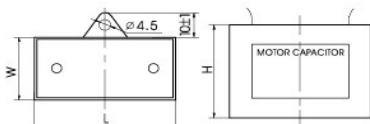
	Reduction Ratio	L(mm)	(kg)
Gearbox	5GN3K-GN15K	42	0.73
	5GN18K-GN36K	60	1.03
	5GN40K-GN200K		1.13
Motor			2.35

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 5GN□K

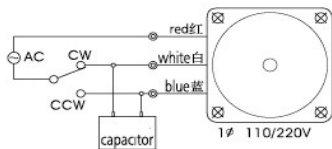
Frequency	Reduction Ratio		Reduction Ratio																					
			3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	0.68	0.82	1.14	1.37	1.72	2.06	2.29	2.86	3.43	4.13	4.59	5.16	6.20	7.44	8.26	9.80	9.80	9.80	9.80	9.80	9.80	9.80
		kgf.cm	6.94	8.37	11.6	14.0	17.6	21.0	23.4	29.2	35.0	42.1	46.8	52.6	63.3	75.9	84.3	100	100	100	100	100	100	100
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	0.58	0.70	0.97	1.16	1.45	1.74	1.93	2.41	2.90	3.48	3.87	4.36	5.23	6.28	6.97	8.72	9.46	9.80	9.80	9.80	9.80	9.80
		kgf.cm	5.92	7.14	9.90	11.8	10.8	17.7	19.7	24.6	29.6	35.5	39.5	44.5	53.4	64.1	71.1	89.0	96.5	100	100	100	100	100

CAPACITOR



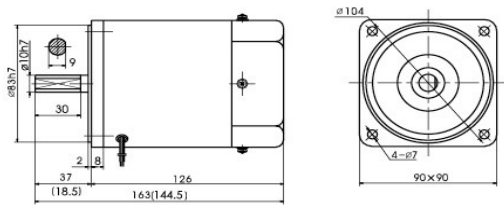
capacity μF	Voltage	L±1	W±1	H±1	Type	
Allowable Deviation:±5%	V	mm	mm	mm	Down-lead	
	3.0	500	38	18		29
	12.0	250	58	25		45

WIRING DIAGRAM



Model of Gearbox: 5GN□K

Frequency	Reduction Ratio		Reduction Ratio			
			180	200	300	500
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
	Allowable Torque	N.m	9.80	9.80	9.80	9.80
		kgf.cm	100	100	100	100
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
	Allowable Torque	N.m	9.80	9.80	9.80	9.80
		kgf.cm	100	100	100	100



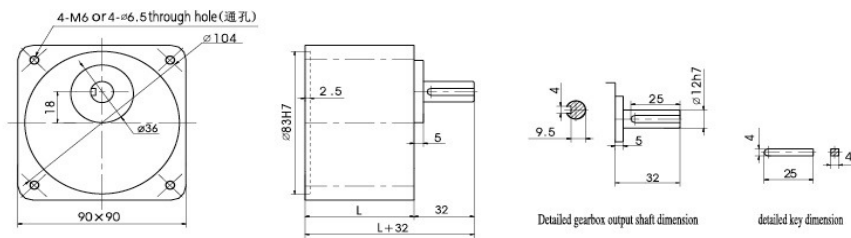
● The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output	Voltage	Frequency	Poles	Duty	Rated			Starting Torque		Capacitor/Ve
Motor	Motor with gear shaft	W	V	Hz	P		Speed r/min	Current A	Torque N.m kgf.cm	N.m	kgf.cm	μ F/VAC
5RK60A-AF	5RK60GN-AF	60	1ph110	50	4	30Min	1350	1.10	0.44 4.40	0.45	4.50	18.0/250
5RK60A-CF	5RK60GN-CF	60	1ph220	50	4	30Min	1350	0.46	0.44 4.40	0.45	4.50	4.5/500

● The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ● Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX

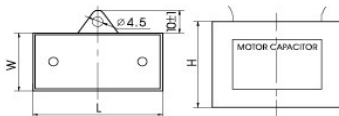


	Reduction Ratio	L(mm)	t(kg)
Gearbox	5GN3K-GN15K	42	0.73
	5GN18K-GN36K		1.03
	5GN40K-GN200K	60	1.13
	5GN300K-GN500K		
Motor			2.70

ALLOWABLE TORQUE ON GEARBOX

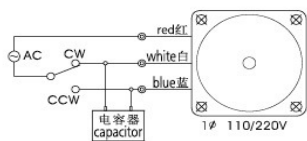
Frequency	Reduction Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		N.m	1.03	1.24	1.72	2.6	2.58	3.10	3.10	3.88	4.65	5.38	5.60	7.01	8.41	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	10.5	12.7	17.6	21.0	26.3	31.6	31.6	39.6	47.4	54.9	57.1	71.6	85.8	100	100	100	100	100	100	100	100	100
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		N.m	0.9	1.08	1.50	1.80	2.23	2.70	2.70	3.38	4.05	4.88	4.88	6.10	7.33	8.79	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	9.18	11.0	15.3	18.4	23.0	27.6	27.6	34.5	41.3	49.5	49.5	62.2	74.7	90.0	100	100	100	100	100	100	100	100

CAPACITOR



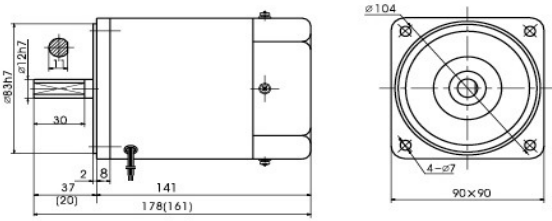
capacity μ F	Voltage	L \pm 1	W \pm 1	H \pm 1	Type	
Allowable Deviation: \pm 5%	4.5	500	49	21	29	Down-lead
	18.0	250	58	25	45	

WIRING DIAGRAM



Model of Gearbox: 5GN□K

Frequency	Reduction Ratio		180	200	300	500
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
		Allowable Torque	N.m	9.80	9.80	9.80
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
		Allowable Torque	N.m	9.80	9.80	9.80
		kgf.cm	100	100	100	100



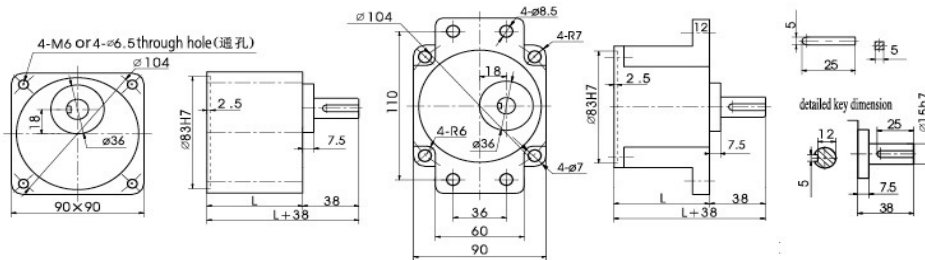
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated				Starting Torque		Capacitor/Ve μF/VAC
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m	kgf.cm	
5RK90A-AF	5RK90GU-AF	90	1ph110	50	4	30Min	1350	1.55	0.64	6.40	0.48	4.80	25.0/250
5RK90A-CF	5RK90GU-CF	90	1ph220	50	4	30Min	1350	0.65	0.64	6.40	0.61	6.10	6.0/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX

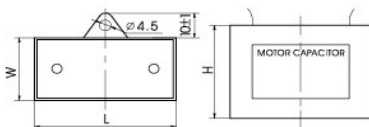


	Reduction Ratio	L(mm)	(kg)
Gearbox	5GU3K-GU9K	65	1.21
	5GU10K-GU18K		1.30
	5GU20K-GU75K		1.40
	5GU90K-GU200K		1.45
	5GU300K-GU500K		
Motor			3.21

ALLOWABLE TORQUE ON GEARBOX

Frequency	Reduction Ratio		Reduction 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
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		N.m	1.55	1.86	2.58	3.10	3.87	4.64	4.65	5.81	6.98	8.37	8.40	10.5	12.6	15.1	16.8	19.6	19.6	19.6	19.6	19.6	19.6	19.6
		kgf.cm	15.8	19.0	29.2	31.6	39.6	47.2	47.4	59.3	71.2	85.4	85.7	107	129	154	171	200	200	200	200	200	200	200
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		N.m	1.35	1.62	2.25	2.70	3.37	4.04	4.05	5.06	6.07	7.29	7.32	9.15	11.0	13.2	14.6	18.3	19.6	19.6	19.6	19.6	19.6	19.6
		kgf.cm	13.8	16.5	23.0	27.6	34.4	41.2	41.3	51.6	61.9	74.4	74.7	93.4	112	135	149	187	200	200	200	200	200	200

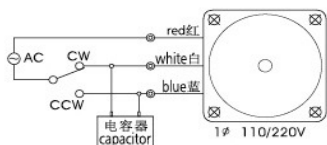
CAPACITOR

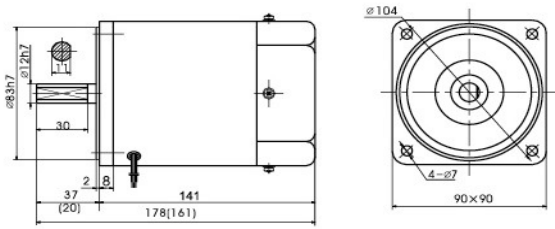


capacity μF	Voltage	L±1	W±1	H±1	Type
Allowable Deviation±5%	V	mm	mm	mm	
6.0	500	47	23	36	
25.0	250	58	23	39	Down-lead

Frequency	Reduction Ratio		Reduction Ratio			
			180	200	300	500
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
		N.m	19.6	19.6	19.6	19.6
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
		N.m	19.6	19.6	19.6	19.6
60Hz	Allowable Torque	kgf.cm	200	200	200	200

WIRING DIAGRAM





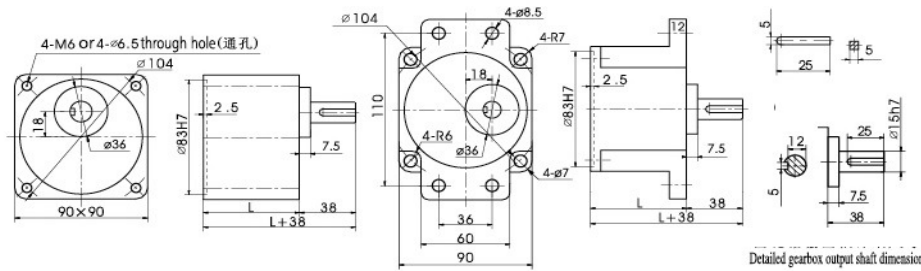
● The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/Ve μ F/VAC
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m	
5RK120A-AF	5RK120GU-AF	120	1ph110	50	4		30Min	1250	2.10	0.90 / 9.00	0.78 / 7.80	30.0/250
5RK120A-CF	5RK120GU-CF	120	1ph220	50	4	30Min	1300	1.10	0.87 / 8.65	0.85 / 8.50	7.0/500	

● The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ● Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX

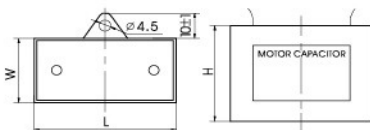


	Reduction Ratio	L(mm)	kg
Gearbox	5GU3K-GU9K	65	1.21
	5GU10K-GU18K		1.30
	5GU20K-GU75K		1.40
	5GU90K-GU200K		1.45
	5GU300K-GU500K		
Motor			3.21

ALLOWABLE TORQUE ON GEARBOX

Frequency	Reduction Ratio		Reduction 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
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		N.m	2.14	2.57	3.57	4.29	5.38	6.43	6.43	8.05	9.66	11.6	11.6	14.6	17.5	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
		kgf.cm	21.8	26.2	36.4	43.8	54.7	65.6	65.6	82.1	98.6	118	118	149	196	200	200	200	200	200	200	200	200	200
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		N.m	1.80	2.16	3.00	3.60	4.49	5.39	5.39	6.75	8.10	9.72	9.72	12.2	14.6	17.6	19.5	19.6	19.6	19.6	19.6	19.6	19.6	19.6
		kgf.cm	18.4	22.0	30.6	36.7	45.8	55.0	55.0	68.9	82.7	99.2	99.2	124	149	180	199	200	200	200	200	200	200	200

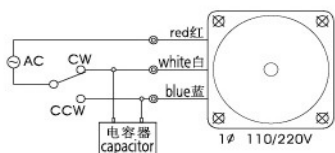
CAPACITOR

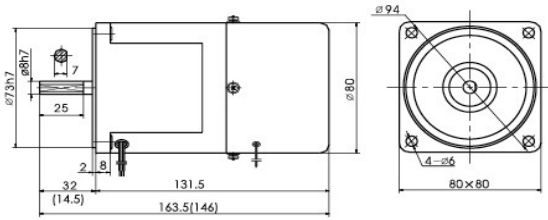


Capacity μ F	Voltage	L ± 1	W ± 1	H ± 1	Type
7.0	500	47	23	36	Down-lead
30.0	250	58	23	39	

Frequency	Reduction Ratio		Reduction Ratio			
			180	200	300	500
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
		Allowable Torque	N.m	19.6	19.6	19.6
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
		Allowable Torque	N.m	19.6	19.6	19.6

WIRING DIAGRAM





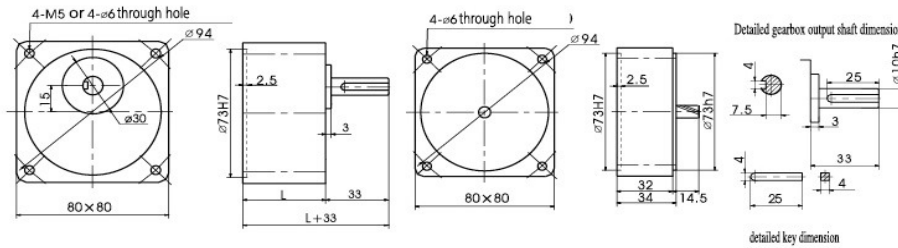
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated				Starting Torque		Capacitor/Ve μ F/VAC
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m	kgf.cm	
4RK25A-AM	4RK25GN-AM	25	1ph110	50	4	30Min	1350	0.43	0.18	1.80	0.17	1.65	8.0/250
4RK25A-CM	4RK25GN-CM	25	1ph220	50	4	30Min	1350	0.24	0.18	1.80	0.14	1.40	2.2/500
4RK25A-SM	4RK25GN-SM	25	3ph220	50	4	30Min	1300	0.25	0.19	1.88	0.52	5.16	/
4RK25A-SM	4RK25GN-SM	25	3ph380	50	4	30Min	1300	0.14	0.19	1.88	0.52	5.16	/

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



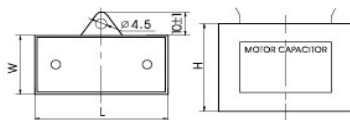
	Reduction Ratio	L(mm)	(kg)
Gearbox	4GN3K-GN20K	32	0.43
	4GN25K-GN50K	43.5	0.57
	4GN60K-GN200K		0.61
Intermediate Gearbox	4GN10X	32	0.43
Motor			2.14

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 4GN□K

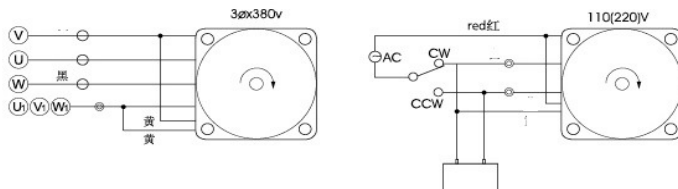
Frequency	Reduction Ratio	Model of Gearbox: 4GN□K																						
		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	0.42	0.52	0.72	0.86	1.07	1.29	1.43	1.79	2.15	2.58	2.87	3.22	3.87	4.65	5.16	6.45	7.00	7.84	7.84	7.84	7.84	7.84
		kgf.cm	4.28	5.3	7.35	8.77	10.9	13.2	14.6	18.3	21.9	26.3	29.3	32.9	39.5	47.4	52.7	65.8	71.4	80.0	80.0	80.0	80.0	80.0
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	0.35	0.42	0.59	0.70	0.88	1.05	1.17	1.46	1.76	2.11	2.34	2.64	3.17	3.80	4.22	5.28	5.73	7.16	7.84	7.84	7.84	7.84
		kgf.cm	3.59	4.30	5.98	7.20	8.97	10.8	12.0	14.9	17.9	21.5	23.9	26.9	32.3	38.8	43.1	53.9	58.8	73.1	80.0	80.0	80.0	80.0

CAPACITOR



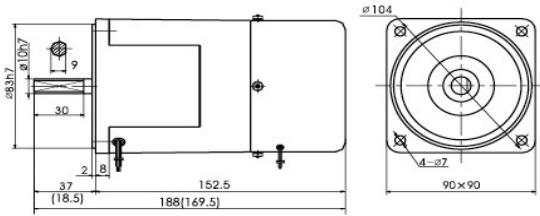
capacity μ F	Voltage	L \pm 1	W \pm 1	H \pm 1	Type	
Allowable Deviation \pm 5%	V	mm	mm	mm	Down-lead	
	2.2	500	38	15		28
	8.0	250	47	23		36

WIRING DIAGRAM



Model of Gearbox: 4GN□K

Frequency	Reduction Ratio	Model of Gearbox: 4GN□K			
		180	200	250	
50Hz	Output Shaft Speed	r/min	8	7.5	6
	Allowable Torque	N.m	7.84	7.84	7.84
		kgf.cm	80.0	80.0	80.0
60Hz	Output Shaft Speed	r/min	10	9	7.2
	Allowable Torque	N.m	7.80	7.80	7.80
		kgf.cm	80.0	80.0	80.0



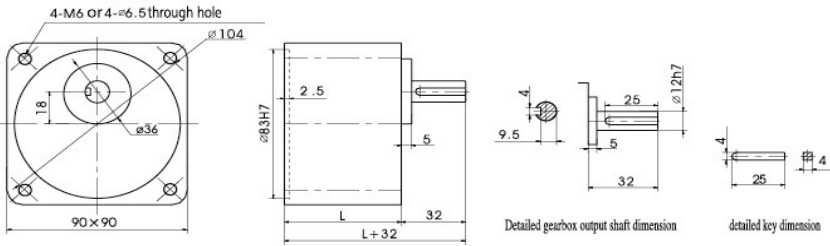
● The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/ve μ F/VAC	
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m		kgf.cm
5RK40A-AM	5RK40GN-AM	40	1ph110	50	4	30Min	1350	0.68	0.29	2.85	0.30	3.00	12.0/250
5RK40A-CM	5RK40GN-CM	40	1ph220	50	4	30Min	1350	0.35	0.29	2.85	0.30	3.00	3.0/500
5RK40A-5M	5RK40GN-5M	40	3ph220	50	4	30Min	1300	0.38	0.29	2.90	1.15	11.5	/
5RK40A-SM	5RK40GN-SM	40	3ph380	50	4	30Min	1300	0.22	0.29	2.90	1.15	11.5	/

● The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ● Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



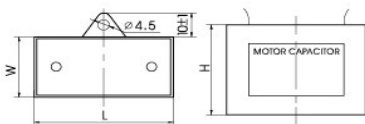
	Reduction Ratio	L(mm)	(kg)
Gearbox	5GN3K-GN15K	42	0.73
	5GN18K-GN36K	60	1.03
	5GN40K-GN200K		1.13
Motor			3.08

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 5GN□K

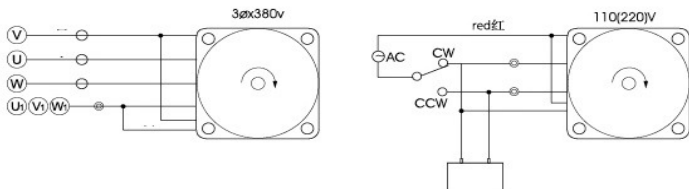
Frequency	Reduction Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		N.m	0.68	0.82	1.14	1.37	1.72	2.06	2.29	2.86	3.43	4.13	4.59	5.16	6.20	7.44	8.26	9.80	9.80	9.80	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	6.94	8.37	11.6	14.0	17.6	21.0	23.4	29.2	35.0	42.1	46.8	52.6	63.3	75.9	84.3	100	100	100	100	100	100	100
		N.m	0.58	0.70	0.97	1.16	1.45	1.74	1.93	2.41	2.90	3.48	3.87	4.36	5.23	6.28	6.97	8.72	9.46	9.80	9.80	9.80	9.80	9.80
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		N.m	0.58	0.70	0.97	1.16	1.45	1.74	1.93	2.41	2.90	3.48	3.87	4.36	5.23	6.28	6.97	8.72	9.46	9.80	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	5.92	7.14	9.90	11.8	10.8	17.7	19.7	24.6	29.6	35.5	39.5	44.5	53.4	64.1	71.1	89.0	96.5	100	100	100	100	100
		N.m	0.58	0.70	0.97	1.16	1.45	1.74	1.93	2.41	2.90	3.48	3.87	4.36	5.23	6.28	6.97	8.72	9.46	9.80	9.80	9.80	9.80	9.80

CAPACITOR



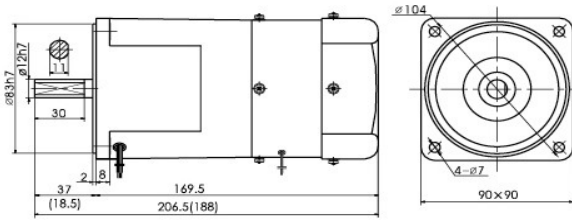
capacity μ F	Voltage	L \pm 1	W \pm 1	H \pm 1	Type
3.0	500	38	18	29	Down-lead
12.0	250	58	25	45	

WIRING DIAGRAM



Model of Gearbox: 5GN□K

Frequency	Reduction Ratio		180	200	300	500
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
		N.m	9.80	9.80	9.80	9.80
60Hz	Output Shaft Speed	kgf.cm	100	100	100	100
		r/min	10	9	6	3.6
60Hz	Allowable Torque	N.m	9.80	9.80	9.80	9.80
		kgf.cm	100	100	100	100



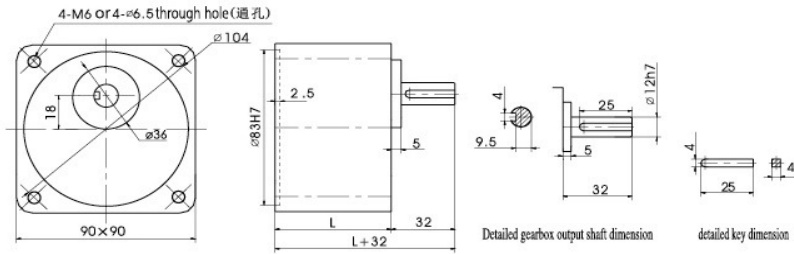
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated				Starting Torque		Capacitor/Ve μF/VAC
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m	kgf.cm	
5RK60A-AMF	5RK60GN-AMF	60	1ph110	50	4	30Min	1350	1.10	0.44	4.40	0.45	4.50	18.0/250
5RK60A-CMF	5RK60GN-CMF	60	1ph220	50	4	30Min	1350	0.45	0.44	4.40	0.45	4.50	4.5/500
5RK60A-SMF	5RK60GN-SMF	60	3ph220	50	4	30Min	1350	0.49	0.46	4.55	1.70	17.00	/
5RK60A-SMF	5RK60GN-SMF	60	3ph380	50	4	30Min	1350	0.28	0.46	4.55	1.70	17.00	/

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



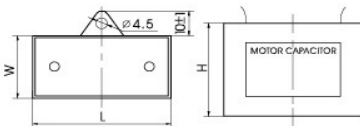
	Reduction Ratio	L(mm)	(kg)
Gearbox	5GN3K-GN15K	42	0.73
	5GN18K-GN36K	60	1.03
	5GN40K-GN200K		1.13
	5GN300K-GN500K		3.43
Motor			3.43

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 5GN□K

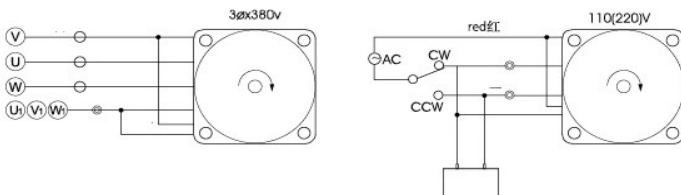
Frequency	Reduction Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		N.m	1.03	1.24	1.72	2.6	2.58	3.10	3.10	3.88	4.65	5.38	5.60	7.01	8.41	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	10.5	12.7	17.6	21.0	26.3	31.6	31.6	39.6	47.4	54.9	57.1	71.6	85.8	100	100	100	100	100	100	100	100	100
		N.m	0.9	1.08	1.50	1.80	2.23	2.70	2.70	3.38	4.05	4.88	4.88	6.10	7.33	8.79	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		N.m	0.9	1.08	1.50	1.80	2.23	2.70	2.70	3.38	4.05	4.88	4.88	6.10	7.33	8.79	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	9.18	11.0	15.3	18.4	23.0	27.6	27.6	34.5	41.3	49.5	49.5	62.2	74.7	90.0	100	100	100	100	100	100	100	100
		N.m	9.18	11.0	15.3	18.4	23.0	27.6	27.6	34.5	41.3	49.5	49.5	62.2	74.7	90.0	100	100	100	100	100	100	100	100

CAPACITOR



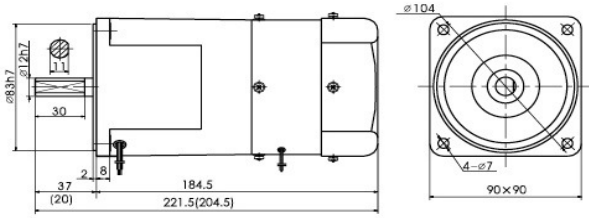
Capacitance μF	Voltage	L±1	W±1	H±1	Type
4.5	500	49	21	29	Down-lead
18.0	250	58	25	45	

WIRING DIAGRAM



Model of Gearbox: 5GN□K

Frequency	Reduction Ratio		180	200	300	500
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
		N.m	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	100	100	100	100
		N.m	9.80	9.80	9.80	9.80
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
		N.m	9.80	9.80	9.80	9.80
	Allowable Torque	kgf.cm	100	100	100	100
		N.m	9.80	9.80	9.80	9.80



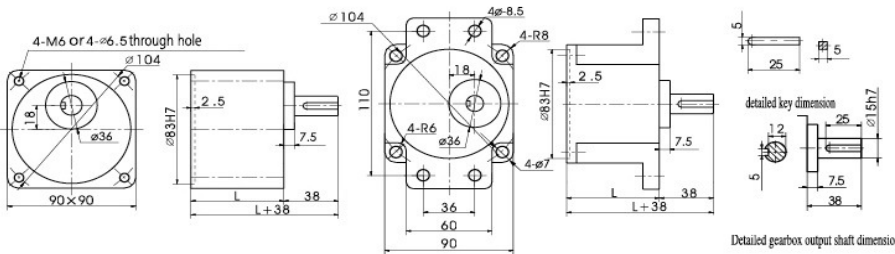
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/ve μ F/VAC	
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m		kgf.cm
5RK90A-AMF	5RK90GU-AMF	90	1ph110	50	4	30Min	1350	1.55	0.64	6.40	0.48	4.80	25.0/250
5RK90A-CMF	5RK90GU-CMF	90	1ph220	50	4	30Min	1350	0.59	0.64	6.40	0.48	4.80	6.0/500
5RK90A-SMF	5RK90GU-SMF	90	3ph220	50	4	30Min	1350	0.66	0.66	6.60	2.30	23.00	/
5RK90A-S*MF	5RK90GU-S*MF	90	3ph380	50	4	30Min	1350	0.28	0.66	6.60	2.30	23.00	/

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



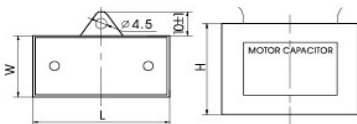
	Reduction Ratio	L(mm)	(kg)
Gearbox	5GU3K-GU9K	65	1.21
	5GU10K-GU18K		1.30
	5GU20K-GU75K		1.40
	5GU90K-GU200K		1.45
	5GU300K-GU500K		
Motor			3.94

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 5GU□K

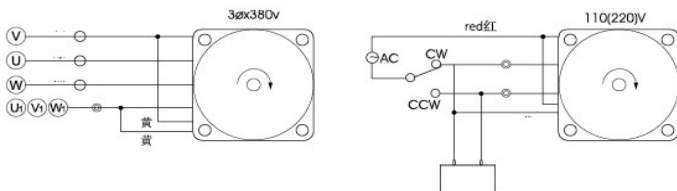
Frequency	Reduction Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	
		Allowable Torque	N.m	1.55	1.86	2.58	3.10	3.87	4.64	4.65	5.81	6.98	8.37	8.40	10.5	12.6	15.1	16.8	19.6	19.6	19.6	19.6	19.6	19.6	19.6
	Allowable Torque	kgf.cm	15.8	19.0	29.2	31.6	39.6	47.2	47.4	59.3	71.2	85.4	85.7	107	129	154	171	200	200	200	200	200	200	200	200
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	
		Allowable Torque	N.m	1.35	1.62	2.25	2.70	3.37	4.04	4.05	5.06	6.07	7.29	7.32	9.15	11.0	13.2	14.6	18.3	19.6	19.6	19.6	19.6	19.6	19.6
	Allowable Torque	kgf.cm	13.8	16.5	23.0	27.6	34.4	41.2	41.3	51.6	61.9	74.4	74.7	93.4	112	135	149	187	200	200	200	200	200	200	200

CAPACITOR



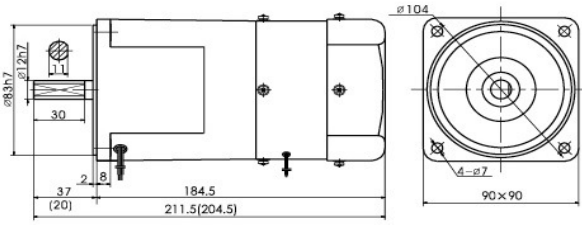
capacity μ F	Voltage	L \pm 1	W \pm 1	H \pm 1	Type
6.0	500	47	23	36	Down-lead
25.0	250	58	23	39	

WIRING DIAGRAM



Model of Gearbox: 5GU□K

Frequency	Reduction Ratio		180	200	300	500
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
		Allowable Torque	N.m	19.6	19.6	19.6
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
		Allowable Torque	N.m	19.6	19.6	19.6
		kgf.cm	200	200	200	200



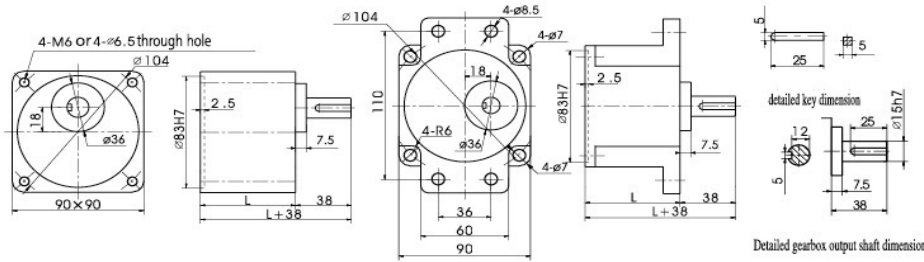
● The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated			Starting Torque		Capacitor/Ve μ F/VAC	
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m		kgf.cm
5RK120A-AMF	5RK120GU-AMF	120	1ph110	50	4	30Min	1300	2.10	0.90	9.00	0.78	7.80	30.0/250
5RK120A-CMF	5RK120GU-CMF	120	1ph220	50	4	30Min	1300	0.92	0.87	8.65	0.75	7.50	7.0/500
5RK120A-SMF	5RK120GU-SMF	120	3ph220	50	4	30Min	1300	0.86	0.87	8.65	3.00	30.00	/
5RK120A-S*MF	5RK120GU-S*MF	120	3ph380	50	4	30Min	1300	0.51	0.87	8.65	3.00	30.00	/

● The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ● Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



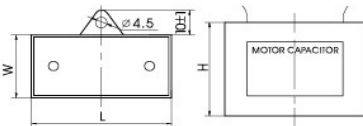
	Reduction Ratio	L(mm)	(kg)
Gearbox	5GU3K-GU9K	65	1.21
	5GU10K-GU18K		1.30
	5GU20K-GU75K		1.40
	5GU90K-GU200K		1.45
	5GU300K-GU500K		
Motor			4.18

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 5GU□K

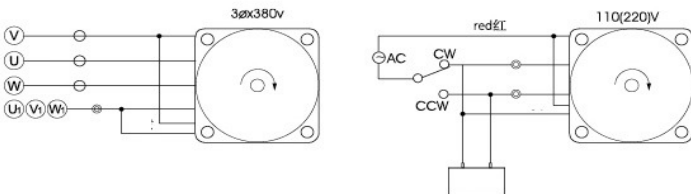
Frequency	Reduction Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		N.m	2.14	2.57	3.57	4.29	5.38	6.43	6.43	8.05	9.66	11.6	11.6	14.6	17.5	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
	Allowable Torque	kgf.cm	21.8	26.2	36.4	43.8	54.7	65.6	65.6	82.1	98.6	118	118	149	196	200	200	200	200	200	200	200	200	200
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		N.m	1.80	2.16	3.00	3.60	4.49	5.39	5.39	6.75	8.10	9.72	9.72	12.2	14.6	17.6	19.5	19.6	19.6	19.6	19.6	19.6	19.6	19.6
	Allowable Torque	kgf.cm	18.4	22.0	30.6	36.7	45.8	55.0	55.0	68.9	82.7	99.2	99.2	124	149	180	199	200	200	200	200	200	200	200

CAPACITOR



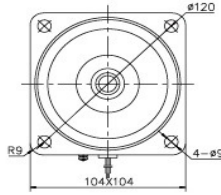
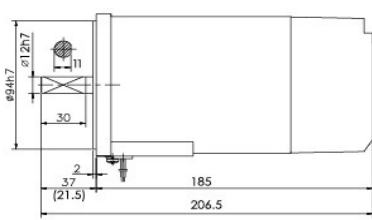
capacity μ F	Voltage	L \pm 1	W \pm 1	H \pm 1	Type
Allowable Deviation \pm 5%	V	mm	mm	mm	Down-lead
	7.0	500	47	23	
	30.0	250	58	23	

WIRING DIAGRAM



Model of Gearbox: 5GU□K

Frequency	Reduction Ratio		180	200	300	500
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
		N.m	19.6	19.6	19.6	19.6
	Allowable Torque	kgf.cm	200	200	200	200
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
		N.m	19.6	19.6	19.6	19.6
	Allowable Torque	kgf.cm	200	200	200	200



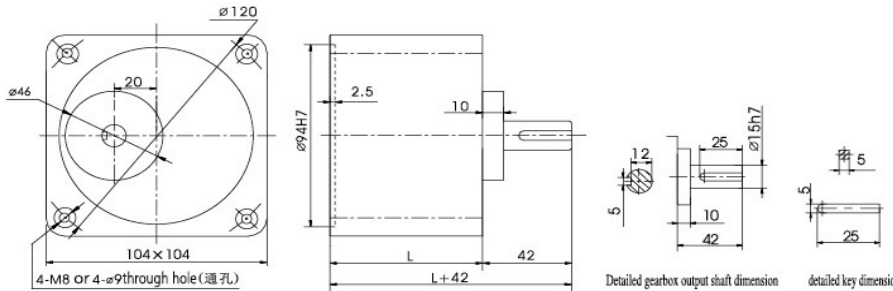
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated				Starting Torque		Capacitor/ve
							Speed r/min	Current A	Torque N.m / kgf.cm		N.m	kgf.cm	μF/VAC
6RK140A-AM	6RK140GU-AM	140	1ph110	50	4	30Min	1350	2.00	0.99	9.95	0.90	9.00	30.0/250
6RK140A-CM	6RK140GU-CM	140	1ph220	50	4	30Min	1350	1.13	0.099	9.95	0.90	9.00	10.0/500
6RK140A-SM	6RK140GU-SM	140	3ph220	50	4	30Min	1350	0.95	0.99	9.95	3.50	35.00	/
6RK140A-S*M	6RK140GU-S*M	140	3ph380	50	4	30Min	1350	0.55	0.99	9.95	3.50	35.00	/

The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



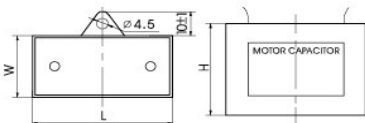
	Reduction Ratio	L(mm)	(kg)
Gearbox	6GU3K-GU9K	72	1.87
	6GU10K-GU18K		2.10
	6GU20K-GU200K		2.75
Motor			5.68

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 6GU□K

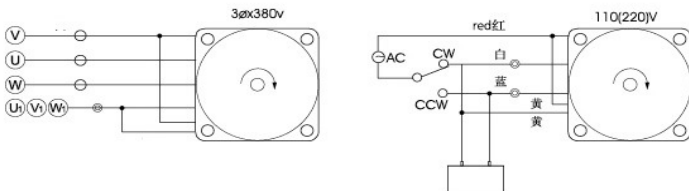
Frequency	Reduction Ratio	Model of Gearbox: 6GU□K																						
		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	2.36	2.83	3.93	4.71	5.89	7.07	7.07	8.85	10.6	12.7	12.7	16.0	19.2	23.0	25.6	32.0	38.4	39.2	39.2	39.2	39.2	39.2
		kgf.cm	24.1	28.8	40.1	48.1	60.1	72.1	72.1	90.3	108	130	130	163	196	235	261	327	292	400	400	400	400	400
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	2.03	2.44	3.39	4.06	5.08	6.09	6.09	7.60	9.15	11.0	11.0	13.8	16.6	19.9	22.1	27.6	33.1	39.2	39.2	39.2	39.2	39.2
		kgf.cm	20.7	24.9	34.6	41.2	51.8	62.1	62.1	77.6	93.4	112	112	141	169	203	226	282	338	400	400	400	400	400

CAPACITOR



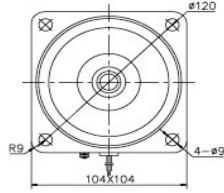
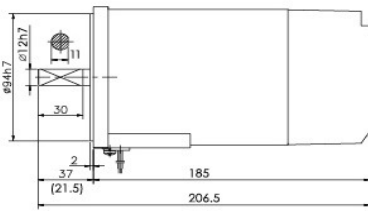
capacity μF	Voltage	L±1	W±1	H±1	Type
Allowable Deviations±5%					
10.0	500	47	26	39	Down-lead
30.0	250	68	32	56	

WIRING DIAGRAM



Model of Gearbox: 6GU□K

Frequency	Reduction Ratio	Model of Gearbox: 6GU□K	
		180	200
50Hz	Output Shaft Speed	r/min	8 / 7.5
	Allowable Torque	N.m / kgf.cm	39.2 / 39.2
60Hz	Output Shaft Speed	r/min	10 / 9
	Allowable Torque	N.m / kgf.cm	39.2 / 39.2



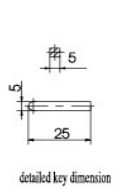
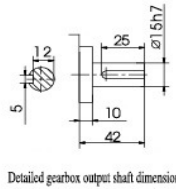
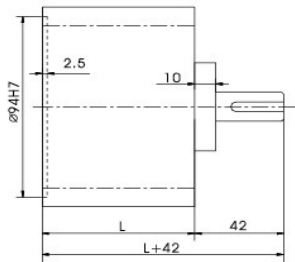
● The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	Rated				Starting Torque		Capacitor/Ve μF/VAC
Motor	Motor with gear shaft						Speed r/min	Current A	Torque N.m / kgf.cm		N.m	kgf.cm	
6RK180A-AM	6RK180GU-AM	180	1ph110	50	4	30Min	1350	1.90	1.25	12.5	0.63	6.30	35.0/250
6RK180A-CM	6RK180GU-CM	180	1ph220	50	4	30Min	1350	1.17	1.25	12.5	0.81	8.10	12.0/500
6RK180A-SM	6RK180GU-SM	180	3ph220	50	4	30Min	1350	0.89	1.25	12.5	4.60	46.00	/
6RK180A-S*M	6RK180GU-S*M	180	3ph380	50	4	30Min	1350	0.51	1.25	12.5	4.60	46.00	/

● The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ● Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



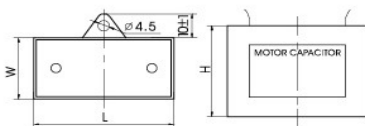
	Reduction Ratio	L(mm)	(kg)
Gearbox	6GU3K-GU9K	65	1.87
	6GU10K-GU18K		2.10
	6GU20K-GU200K		2.75
Motor			5.59

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 6GU□K

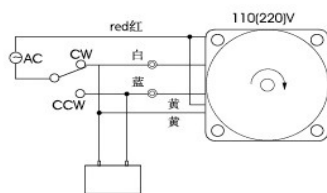
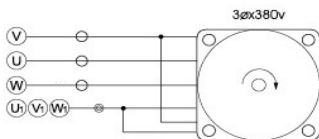
Frequency	Reduction Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		Allowable Torque	N.m	2.06	2.48	3.44	4.13	5.16	6.19	6.19	7.75	9.30	11.2	11.2	14.0	16.8	20.0	22.4	28.0	33.6	39.2	39.2	39.2	39.2
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		Allowable Torque	N.m	1.74	2.09	2.90	3.48	4.35	5.22	5.22	6.54	7.85	9.42	9.42	11.8	14.2	17.0	18.9	23.6	28.4	35.5	39.2	39.2	39.2
		kgf.cm	17.8	21.3	29.6	35.5	44.4	53.3	53.3	69.7	80.0	96.1	96.1	121	146	174	193	241	289	362	400	400	400	400

CAPACITOR



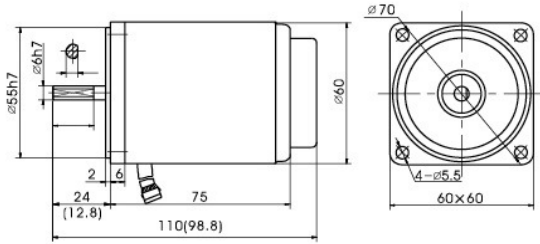
capacity μF	Voltage	L±1	W±1	H±1	Type
Allowable Deviation±5%	V	mm	mm	mm	Down-lead
	12.0	500	58	23	
35.0	250	68	32	56	

WIRING DIAGRAM



Model of Gearbox: 6GU□K

Frequency	Reduction Ratio		180	200
50Hz	Output Shaft Speed	r/min	8	7.5
		Allowable Torque	N.m	39.2
60Hz	Output Shaft Speed	r/min	10	9
		Allowable Torque	N.m	39.2
		kgf.cm	400	400



●The value in the () is the value of small gear shaft motor.

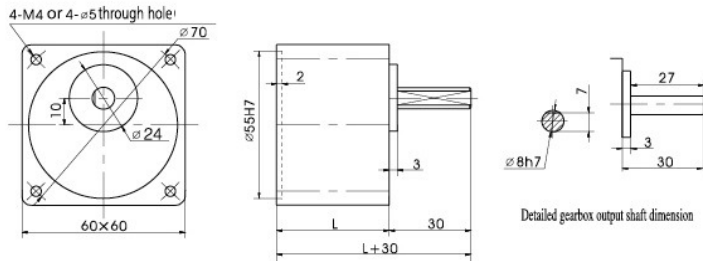


LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output	Voltage	Frequency	Poles	Duty	RPM	Allowable Torque				Starting Torque		Capacitor/Ve
								1200r/minL		90r/min		N.m	kgf.cm	
Motor	Motor with gear shaft	W	V	Hz	P		r/min	N.m	kgf.cm	N.m	kgf.cm	N.m	kgf.cm	μF/VAC
2IK6RA-A	2IK6RGN-A	6	1ph110	50	4	CONT	90~1350	0.05	0.50	0.03	0.29	0.03	0.33	3.0/250
2IK6RA-C	2IK6RGN-C	6	1ph220	50	4	CONT	90~1350	0.05	0.50	0.03	0.29	0.03	0.33	0.8/500
2RK6RA-A	2RK6RGN-A	6	1ph110	50	4	30Min	90~1350	0.06	0.55	0.03	0.32	0.04	0.38	3.0/250
2RK6RA-C	2RK6RGN-C	6	1ph220	50	4	30Min	90~1350	0.06	0.55	0.03	0.32	0.04	0.38	1.0/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



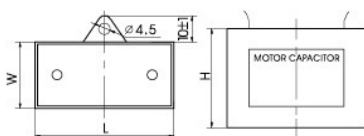
	Reduction Ratio	L(mm)	(kg)
Gearbox	2GN3K-GN18K	32	0.24
	2GN20K-GN50K	42	0.30
	2GN60K-GN200K		0.33
Motor			0.82

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 2GN□K

Frequency	Reduction 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
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	0.13	0.15	0.21	0.26	0.31	0.38	0.42	0.53	0.63	0.76	0.76	0.95	1.14	1.36	1.52	1.72	2.06	2.57	2.94	2.94	2.94	2.94
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	0.10	0.13	0.17	0.21	0.26	0.30	0.34	0.43	0.51	0.62	0.62	0.76	0.92	1.11	1.24	1.39	1.67	2.09	2.50	2.78	2.94	2.94
		kgf.cm	1.0	1.3	1.7	2.1	2.6	3.1	3.5	4.4	5.2	6.3	6.3	7.8	9.4	11.3	12.6	14.2	17.0	21.3	25.5	28.4	30.0	30.0

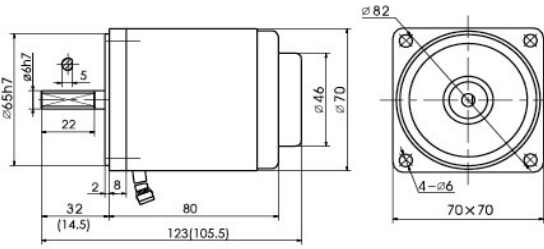
CAPACITOR



capacity μF	Voltage	L±1	W±1	H±1	Type	
Allowable Deviation:±5%	V	mm	mm	mm	Down-lead	
	0.8	500	37	14		28
	1.0	500	37	14		28
	3.0	250	49	21		29
	3.5	250	47	22		34

Model of Gearbox: 2GN□K

Frequency	Reduction Ratio		180	200
50Hz	Output Shaft Speed	r/min	8	7.5
	Allowable Torque	N.m	2.94	2.94
60Hz	Output Shaft Speed	r/min	10	9
	Allowable Torque	N.m	2.94	2.94
		kgf.cm	30.0	30.0



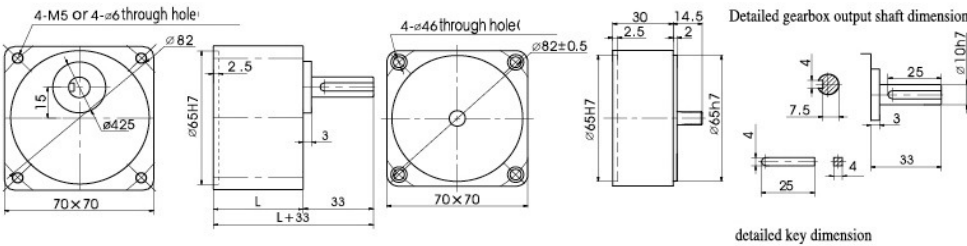
● The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	RPM r/min	Allowable Torque				Starting Torque		Capacitor/Ve μ F/VAC
Motor	Motor with gear shaft							1200r/min		90r/min		N.m	kgf.cm	
3IK15RA-A	3IK15RGN-A	15	1ph110	50	4	CONT	90~1350	0.12	1.20	0.04	0.35	0.06	0.55	5.0/250
3IK15RA-C	3IK15RGN-C	15	1ph220	50	4	CONT	90~1350	0.12	1.20	0.04	0.35	0.06	0.55	1.2/500
3RK15RA-A	3RK15RGN-A	15	1ph110	50	4	30Min	90~1350	0.13	1.30	0.04	0.40	0.07	0.65	6.0/250
3RK15RA-C	3RK15RGN-C	15	1ph220	50	4	30Min	90~1350	0.13	1.30	0.04	0.40	0.07	0.65	1.5/500

● The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ● Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



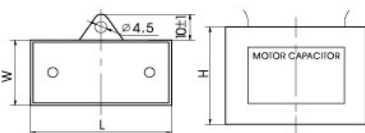
	Reduction Ratio	L(mm)	(kg)
Gearbox	3GN3K-GN15K	32	0.38
	3GN18K-GN50K	42	0.47
	3GN60K-GN200K		0.52
Intermediate Gearbox	3GN10X	30	0.38
Motor			1.17

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 3GN□K

Frequency	Reduction Ratio	Model of Gearbox: 3GN□K																						
		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	
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	0.31	0.38	0.53	0.64	0.79	0.95	1.06	1.32	1.59	1.90	1.90	2.37	2.85	3.42	3.81	4.28	4.90	4.90	4.90	4.90	4.90	4.90
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	0.29	0.35	0.50	0.60	0.75	0.89	0.99	1.25	1.49	1.79	1.79	2.24	2.68	3.22	3.58	4.02	4.90	4.90	4.90	4.90	4.90	4.90
		kgf.cm	3.0	3.6	5.1	6.1	7.6	9.1	10.1	12.7	15.2	18.2	18.2	22.8	27.3	32.8	36.5	41.0	50.0	50.0	50.0	50.0	50.0	50.0

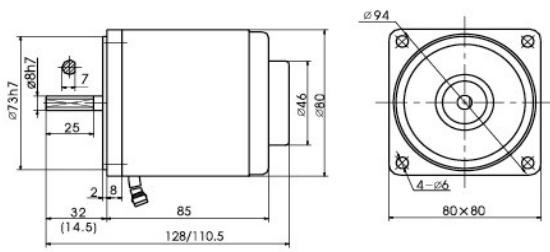
CAPACITOR



capacitv μ F	Voltage	L \pm 1	W \pm 1	H \pm 1	Type
Allowable Deviation:±5%	500	37	14	28	Down-lead
	250	47	22	34	
	500	38	14	28	
	500	38	14	28	
	250	47	23	36	

Model of Gearbox: 3GN□K

Frequency	Reduction Ratio	Model of Gearbox: 3GN□K	
		180	200
50Hz	Output Shaft Speed	r/min	8 7.5
	Allowable Torque	N.m	4.90 4.90
60Hz	Output Shaft Speed	kgf.cm	50.0 50.0
	Allowable Torque	r/min	10 9
60Hz	Allowable Torque	N.m	4.90 4.90
	Allowable Torque	kgf.cm	50.0 50.0



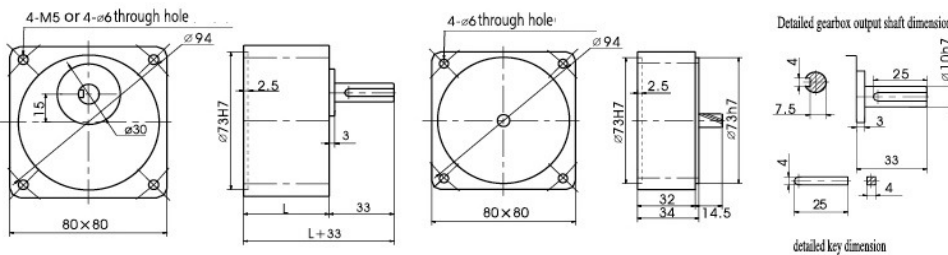
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output	Voltage	Frequency	Poles	Duty	RPM	Allowable Torque				Starting Torque		Capacitor/Ve
Motor	Motor with gear shaft	W	V	Hz	P			r/min	1200r/min		90r/min		N.m	kgf.cm
4IK25RA-A	4IK25RGN-A	25	1ph110	50	4	CONT	90~1350	0.19	1.90	0.05	0.45	0.13	0.45	7.0/250
4IK25RA-C	4IK25RGN-C	25	1ph220	50	4	CONT	90~1350	0.19	1.90	0.05	0.45	0.13	0.45	1.8/500
4RK25RA-A	4RK25RGN-A	25	1ph110	50	4	30Min	90~1350	0.20	2.00	0.05	0.50	0.15	0.50	8.0/250
4RK25RA-C	4RK25RGN-C	25	1ph220	50	4	30Min	90~1350	0.20	2.00	0.05	0.50	0.18	0.50	2.2/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



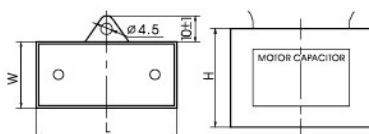
	Reduction Ratio	L(mm)	(kg)
Gearbox	4GN3K-GN20K	32	0.43
	4GN25K-GN50K	43.5	0.57
	4GN60K-GN200K		0.61
Intermediate Gearbox	4GN10X	32	0.43
Motor			1.64

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 4GN□K

Frequency	Reduction 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
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		N.m	0.42	0.52	0.72	0.86	1.07	1.29	1.43	1.79	2.15	2.58	2.87	3.22	3.87	4.65	5.16	6.45	7.00	7.84	7.84	7.84	7.84	7.84
	Allowable Torque	kgf.cm	4.28	5.3	7.35	8.77	10.9	13.2	14.6	18.3	21.9	26.3	29.3	32.9	39.5	47.4	52.7	65.8	71.4	80.0	80.0	80.0	80.0	80.0
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		N.m	0.35	0.42	0.59	0.70	0.88	1.05	1.17	1.46	1.76	2.11	2.34	2.64	3.17	3.80	4.22	5.28	5.73	7.16	7.84	7.84	7.84	7.84
	Allowable Torque	kgf.cm	3.59	4.30	5.98	7.20	8.97	10.8	12.0	14.9	17.9	21.5	23.9	26.9	32.3	38.8	43.1	53.9	58.8	73.1	80.0	80.0	80.0	80.0

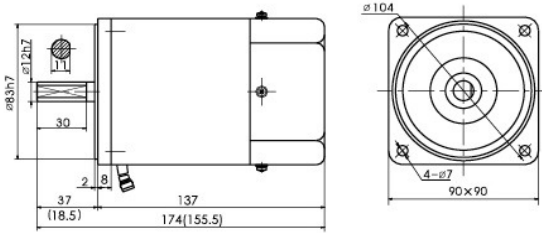
CAPACITOR



capacity μ F	Voltage	L \pm 1	W \pm 1	H \pm 1	Type	
Allowable Deviation: \pm 5%	V	mm	mm	mm	Down-lead	
	1.8	500	38	18		28
	2.2	500	38	18		28
	7.0	250	47	26		36
8.0	250	47	26	38		

Model of Gearbox: 4GN□K

Frequency	Reduction Ratio		180	200	250
50Hz	Output Shaft Speed	r/min	8	7.5	6
		N.m	7.84	7.84	7.84
	Allowable Torque	kgf.cm	80.0	80.0	80.0
60Hz	Output Shaft Speed	r/min	10	9	7.2
		N.m	7.84	7.84	7.84
	Allowable Torque	kgf.cm	80.0	80.0	80.0



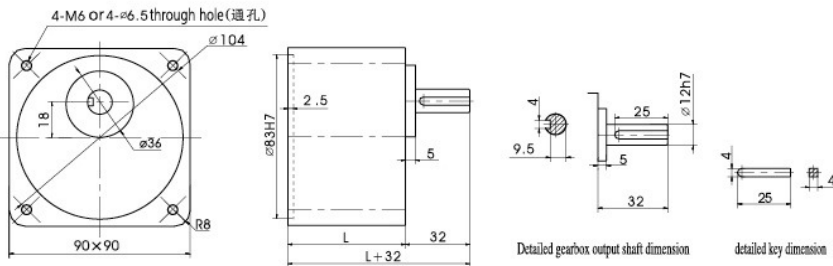
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor	Output	Voltage	Frequency	Poles	Duty	RPM	Allowable Torque				Starting Torque		Capacitor/Ve	
							1200r/min時		90r/min時		N.m	kgf.cm		μF/VAC
							r/min	N.m	kgf.cm	N.m			kgf.cm	
5IK60RA-AF	5IK60RGN-AF	60	1ph110	50	4	CONT	90~1350	0.50	5.00	0.14	1.40	0.31	3.10	15.0/250
5IK60RA-CF	5IK60RGN-CF	60	1ph220	50	4	CONT	90~1350	0.50	5.00	0.14	1.40	0.33	3.30	4.0/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



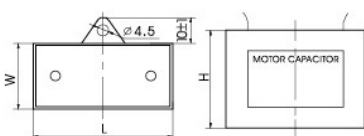
	Reduction Ratio	L(mm)	(kg)
Gearbox	5GN3K-GN18K	42	0.73
	5GN20K-GN36K		1.03
	5GN40K-GN200K	60	1.13
	5GN300K-GN500K		
Motor			2.76

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 5GN□K

Frequency	Reduction Ratio		Reduction 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
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	1.03	1.24	1.72	2.6	2.58	3.10	3.10	3.88	4.65	5.38	5.60	7.01	8.41	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
		kgf.cm	10.5	12.7	17.6	21.0	26.3	31.6	31.6	39.6	47.4	54.9	57.1	71.6	85.8	100	100	100	100	100	100	100	100	100
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	0.9	1.08	1.50	1.80	2.23	2.70	2.70	3.38	4.05	4.88	4.88	6.10	7.33	8.97	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
		kgf.cm	9.18	11.0	15.3	18.4	23.0	27.6	27.6	34.5	41.3	49.5	49.5	62.2	74.7	90.0	100	100	100	100	100	100	100	100

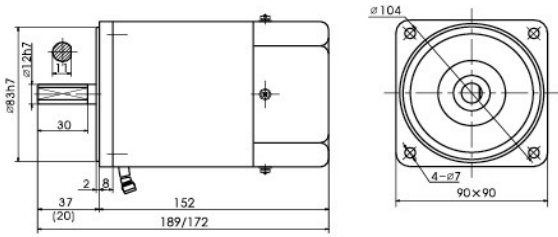
CAPACITOR



capacity μF	Voltage	L±1	W±1	H±1	Type
4.0	500	49	21	29	Down-lead
15.0	250	58	25	45	

Model of Gearbox: 5GN□K

Frequency	Reduction Ratio		Reduction Ratio			
			180	200	300	500
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
	Allowable Torque	N.m	9.80	9.80	9.80	9.80
		kgf.cm	100	100	100	100
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
	Allowable Torque	N.m	9.80	9.80	9.80	9.80
		kgf.cm	100	100	100	100



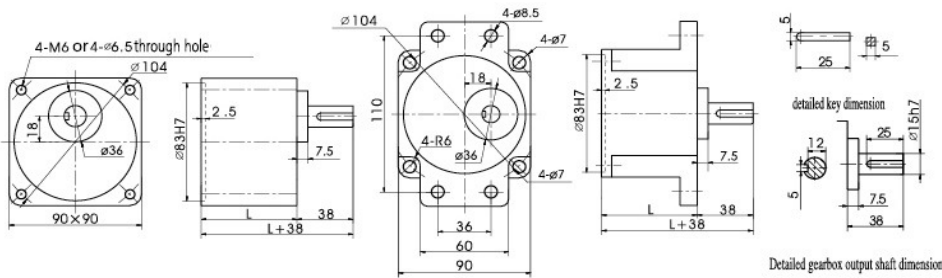
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output W	Voltage V	Frequency Hz	Poles P	Duty	RPM r/min	Allowable Torque				Starting Torque		Capacitor/ve μ F/VAC
Motor	Motor with gear shaft							1200r/min時		90r/min時		N.m	kgf.cm	
5IK90RA-AF	5IK90RGU-AF	90	1ph110	50	4	CONT	90~1350	0.71	7.10	0.23	2.30	0.48	4.80	20.0/250
5IK90RA-CF	5IK90RGU-CF	90	1ph220	50	4	CONT	90~1350	0.71	7.10	0.23	2.30	0.45	4.50	5.0/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



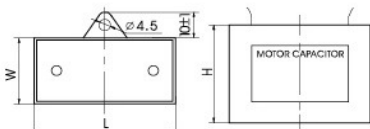
	Reduction Ratio	L(mm)	(kg)
Gearbox	5GU3K-GU9K	65	1.21
	5GU10K-GU18K		1.30
	5GU20K-GU75K		1.40
	5GU90K-GU200K		1.45
Motor			3.27

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 5GU□K

Frequency	Reduction Ratio		Reduction 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
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		Allowable Torque	N.m	1.55	1.86	2.58	3.10	3.87	4.64	4.65	5.81	6.98	8.37	8.40	10.5	12.6	15.1	16.8	19.6	19.6	19.6	19.6	19.6	19.6
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		Allowable Torque	N.m	1.35	1.62	2.25	2.70	3.37	4.04	4.05	5.06	6.07	7.29	7.32	9.15	11.0	13.2	14.6	18.3	19.6	19.6	19.6	19.6	19.6
			kgf.cm	13.8	16.5	23.0	27.6	34.4	41.2	41.3	51.6	61.9	74.4	74.7	93.4	112	135	149	187	200	200	200	200	200

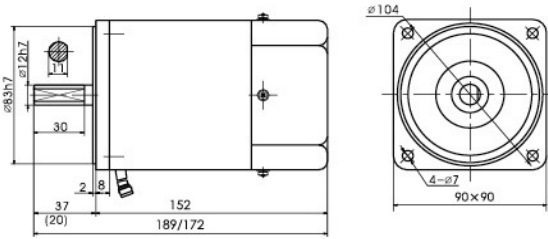
CAPACITOR



capacity μ F	Voltage V	L \pm 1 mm	W \pm 1 mm	H \pm 1 mm	Type
5.0	500	47	23	36	Down-lead
20.0	250	58	23	39	

Model of Gearbox: 5GU□K

Frequency	Reduction Ratio		Reduction Ratio				
			180	200	300	500	
50Hz	Output Shaft Speed	r/min	8	7.5	5	3	
		Allowable Torque	N.m	19.6	19.6	19.6	19.6
60Hz	Output Shaft Speed	r/min	10	9	6	3.6	
		Allowable Torque	N.m	19.6	19.6	19.6	19.6
			kgf.cm	200	200	200	200



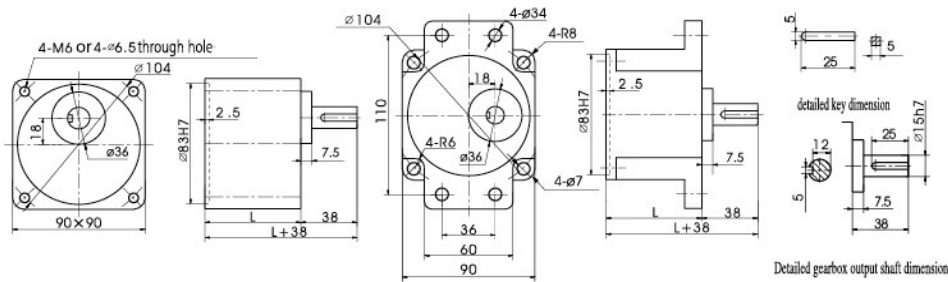
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output	Voltage	Frequency	Poles	Duty	RPM	Allowable Torque				Starting Torque		Capacitor/Ve
Motor	Motor with gear shaft	W	V	Hz	P			r/min	1200r/min		90r/min		N.m	kgf.cm
5IK120RA-AF	5IK120RGU-AF	120	1ph110	50	4	CONT	90~1350	0.75	7.50	0.40	4.00	0.55	5.50	25.0/250
5IK120RA-CF	5IK120RGU-CF	120	1ph220	50	4	CONT	90~1350	0.75	7.50	0.40	4.00	0.65	6.50	7.0/500

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



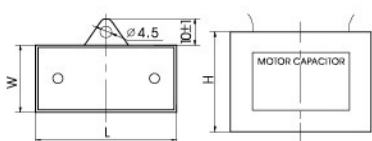
	Reduction Ratio	L(mm)	(kg)
Gearbox	5GU3K-GU9K	65	1.21
	5GU10K-GU18K		1.30
	5GU20K-GU75K		1.40
	5GU90K-GU200K		1.45
Motor			3.51

ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 5GU□K

Frequency	Reduction 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	
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
	Allowable Torque	N.m	2.14	2.57	3.57	4.29	5.38	6.43	6.43	8.05	9.66	11.6	11.6	14.6	17.5	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6
		kgf.cm	21.8	26.2	36.4	43.8	54.7	65.6	65.6	82.1	98.6	118	118	149	196	200	200	200	200	200	200	200	200	200
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
	Allowable Torque	N.m	1.80	2.16	3.00	3.60	4.49	5.39	5.39	6.75	8.10	9.72	9.72	12.2	14.6	17.6	19.5	19.6	19.6	19.6	19.6	19.6	19.6	19.6
		kgf.cm	18.4	22.0	30.6	36.7	45.8	55.0	55.0	68.9	82.7	99.2	99.2	124	149	180	199	200	200	200	200	200	200	200

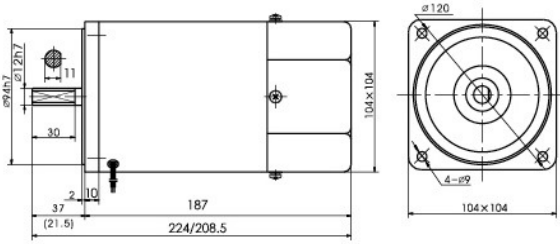
CAPACITOR



capacity μ F	Voltage	L \pm 1	W \pm 1	H \pm 1	Type	
Allowable Deviation \pm 5%	V	mm	mm	mm	Down-lead	
	7.0	500	47	23		36
	25.0	250	58	23		39

Model of Gearbox: 5GU□K

Frequency	Reduction Ratio					
		180	200	300	500	
50Hz	Output Shaft Speed	r/min	8	7.5	5	3
	Allowable Torque	N.m	19.6	19.6	19.6	19.6
		kgf.cm	200	200	200	200
60Hz	Output Shaft Speed	r/min	10	9	6	3.6
	Allowable Torque	N.m	19.6	19.6	19.6	19.6
		kgf.cm	200	200	200	200



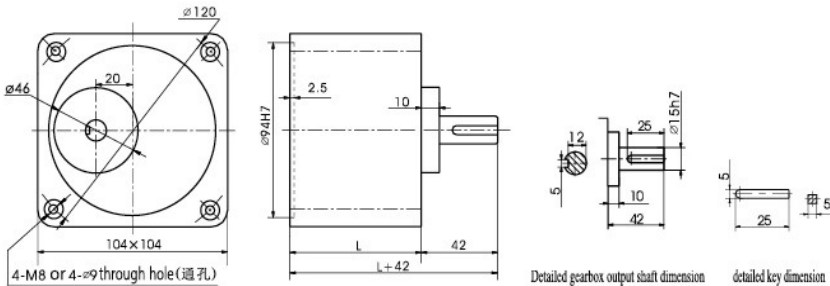
●The value in the () is the value of small gear shaft motor.

LIST OF MOTOR CHARACTERISTICS

Model of Motor		Output	Voltage	Frequency	Poles	Duty	RPM	Allowable Torque				Starting Torque		Capacitor/Ve	
Motor	Motor with gear shaft	W	V	Hz	P			r/min	1200r/min時		90r/min時		N.m	kgf.cm	μF/VAC
									N.m	kgf.cm	N.m	kgf.cm			
6IK180RA-AF	6IK180RGU-AF	180	1ph110	50	4	CONT	90~1350	1.20	12.00	0.63	6.30	0.80	8.00	35.0/250	
6IK180RA-CF	6IK180RGU-CF	180	1ph220	50	4	CONT	90~1350	1.20	12.00	0.63	6.30	0.92	9.20	12.0/500	

●The capacitor capacitance will be different under different voltage. A correct capacitor capacitance is required to match the applied voltage. ●Wrong capacitor capacitance is the cause of trouble. You must confirm a correct voltage and select a correct model when your purchase order is placed.

OVERALL DIMENSION OF GEARBOX



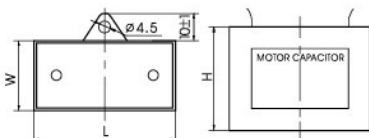
	Reduction Ratio	L(mm)	(kg)
Gearbox	6GU3K-GU9K	65	1.87
	6GU10K-GU18K		2.10
	6GU20K-GU200K		2.75
Motor			4.92

ALLOWABLE TORQUE ON GEARBOX

;Model of Gearbox: 6GU□K

Frequency	Reduction 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	
50Hz	Output Shaft Speed	r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10
		N.m	2.06	2.48	3.44	4.13	5.16	6.19	6.19	7.75	9.30	11.2	11.2	14.0	16.8	20.0	22.4	28.0	33.6	39.2	39.2	39.2	39.2	39.2
	Allowable Torque	kgf.cm	21.0	25.3	35.1	42.1	52.6	63.2	63.2	79.1	94.9	114	114	143	171	206	228	286	343	400	400	400	400	400
60Hz	Output Shaft Speed	r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12
		N.m	1.74	2.09	2.90	3.48	4.35	5.22	5.22	6.54	7.85	9.42	9.42	11.8	14.2	17.0	18.9	23.6	28.4	35.5	39.2	39.2	39.2	39.2
	Allowable Torque	kgf.cm	17.8	21.3	29.6	35.5	44.4	53.3	53.3	69.7	80.0	96.1	96.1	121	146	174	193	241	289	362	400	400	400	400

CAPACITOR



capacity μF	Voltage	L±1	W±1	H±1	Type
Allowable Deviation±5%	V	mm	mm	mm	Down-lead
	12.0	500	58	23	
35.0	250	68	32	56	

Model of Gearbox: 6GU□K

Frequency	Reduction Ratio		
		180	200
50Hz	Output Shaft Speed	r/min	8 7.5
		Allowable Torque	N.m 39.2 39.2
		kgf.cm	400 400
60Hz	Output Shaft Speed	r/min	10 9
		Allowable Torque	N.m 39.2 39.2
		kgf.cm	400 400



DESCRIPTION OF GOVERNOR MODEL

U

Speed Controller Type

U: Combination
S: Separation

S

Speed Controller Function

S: Speed Governor

11

Voltage

11: Single Phase 110V50Hz
22: Single Phase 220V50Hz
33: Digital Display

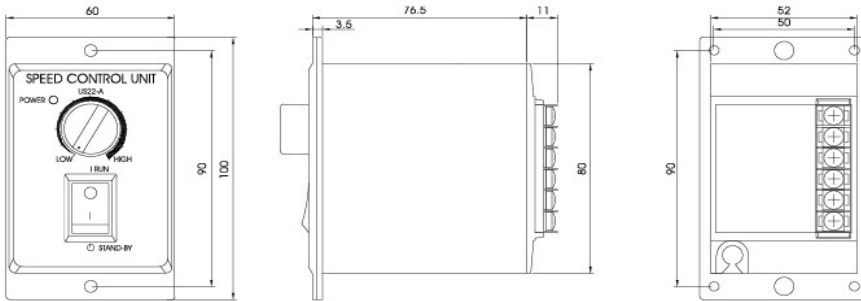
A

Capacitor Mounting Type

A: Built-in Capacitor
B: External Capacitor

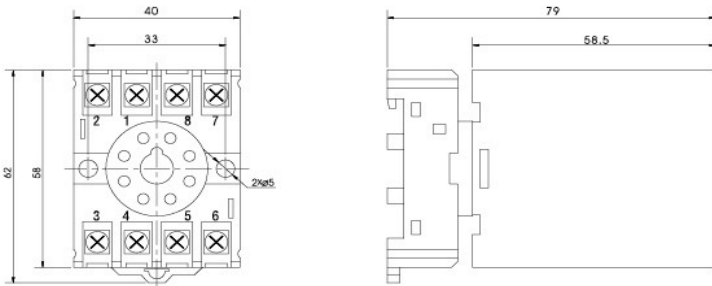
COMBINATION US11、US22

CLOCKWISE AND ANTI-CLOCKWISE SPEED CHANGE



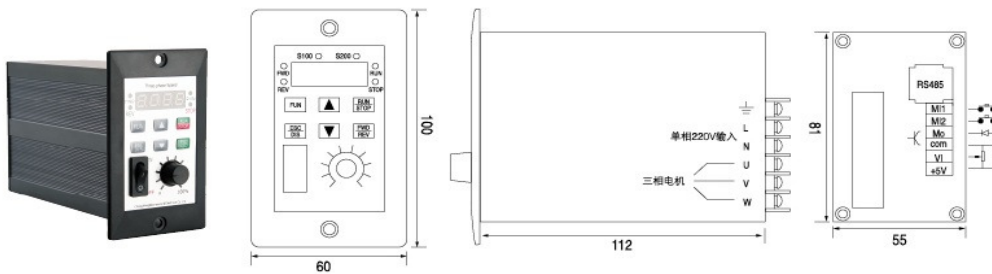
SEPARATION SS11、SS22

CLOCKWISE AND ANTI-CLOCKWISE SPEED CHANGE



LIST OF SPEED GOVERNOR CHARACTERISTICS

Parameter Model	Voltage(V)	Voltage(Hz)	Peak Current(A)	Motor Power(W)	Speed Range(r/min)	Speed Changer	Speed Responder	Speed Stability	Working Ambient Temperature
US11	110V±10%	50/60	5	6~140	90/1350	3%	(0.5)	Excellent	-10°C ~ +50°C
US22	220V±10%	50/60	5	6~140	90/1650	3%	(0.5)	Excellent	-10°C ~ +50°C
SS11	110V±10%	50/60	5	6~140	90/1350	3%	(0.5)	Excellent	-10°C ~ +50°C
SS22	220V±10%	50/60	5	6~140	90/1650	3%	(0.5)	Excellent	-10°C ~ +50°C
SS33	110V±10%	50/60	5	6~140	90/1350	3%	(0.5)	Excellent	-10°C ~ +50°C
	220V±10%	50/60	5	6~140	90/1650	3%	(0.5)	Excellent	-10°C ~ +50°C



TORQUE MOTOR

Torque motor can supply a comparative bigger starting torque. What's more, it has the characters of vertical to below. In the circumstance of working with low speed and block rotate, It can both keep steady and block rotate.

CHARACTER

The scope of speed control is wide: the motor torque is proportionable to the square voltage. You just modify the input voltage in order to control the speed.

Adapt to rolling work: To roll things with steady speed by firm tensility, the output torque will rise to 2times and the speed will reduce to half, when the diameter of rolling shaft rises to 2times. It must keep this proportion when the motor works.

Adapt to block rotate: The design of the torque motor is different from induction motor and reversible motor. It can keep steady torque in the state of block rotate and low speed rotate. It is normally used to the task that need still torque,such as withstand object working. What's more, it can be used to the project which need motor to work in condition of block rotate. The voltage is 60V (110V rated),140V (220V rated)when motor work continuously. It is short time rated when the voltage is 60V or 140V upward. It is 5minutes rated when the voltage is 110V,220V. (Note:the output torque will be big when motor block rotate. Please don't let the torque value surpass the value which the reducer can bear. What's more, please don't strike the motor, or the reducer will be damaged if the strike power is big enough.)

It can be used as brake: In the area of speed-torque character, the torque motor can be used as brake. What's more, you can process firm tensility control by DC magnet stimulating.

110V LIST OF MOTOR CHARACTERISTICS 110V

Model of Motor		DUTY	Voltage	Frequency	Starting Torque		Current at Ultimate Output	Ultimate Output	Speed at Ultimate Output	Torque at Ultimate Output		Capacitor
Round Shaft	Pinion Shaft		V	Hz	kgf.cm	mN.m	A	W	rpm	kgf.cm	mN.m	
2TK3A-A	2TK3GN-A	5MIN	110	50	0.70	69	0.42	3.2	750	0.42	41	7.0/250
		CONT	60		0.26	25	0.16	1.2		0.16	16	
		5MIN	110	60	0.70	69	0.47	3.2	900	0.38	37	6.0/250
		CONT	60		0.26	25	0.30	1.2		0.11	11	
3TK6A-A	3TK6GN-A	5MIN	110	50	1.37	134	0.45	6.0	750	0.82	80	8.0/250
		CONT	60		0.69	68	0.37	2.5		0.37	36	
		5MIN	110	60	1.37	134	0.45	6.5	900	0.76	74	7.0/250
		CONT	60		0.69	68	0.35	2.8		0.31	30	
4TK10A-A	4TK10GN-A	5MIN	110	50	2.40	235	0.70	10	750	1.30	127	10.0/250
		CONT	60		0.75	74	0.45	3.0		0.47	46	
		5MIN	110	60	2.30	25	0.67	10	900	1.30	127	8.0/250
		CONT	60		0.70	69	0.43	3.0		0.39	38	
5TK20A-A	5TK20GN-A	5MIN	110	50	3.70	363	0.92	20	750	2.90	224	15.0/250
		CONT	60		1.40	137	1.58	6.0		0.78	76	
		5MIN	110	60	3.00	294	0.85	26	900	2.20	216	12.0/250
		CONT	60		1.10	108	0.52	6.0		0.65	64	
5TK40A-AF	5TK40GU-AF	5MIN	110	50	6.40	627	1.98	40	750	5.20	510	30.0/250
		CONT	60		2.80	274	0.98	15		1.95	191	
		5MIN	110	60	7.70	755	1.88	40	900	5.06	490	30.0/250
		CONT	60		3.50	343	1.12	15		1.84	180	

220V LIST OF MOTOR CHARACTERISTICS 220V

Model of Motor		DUTY	Voltage	Frequency	Starting Torque		Current at Ultimate Output	Ultimate Output	Speed at Ultimate Output	Torque at Ultimate Output		Capacitor
Round Shaft	Pinion Shaft		V	Hz	kgf.cm	mN.m	A	W	rpm	kgf.cm	mN.m	
2TK3A-C	2TK3GN-C	5MIN	220	50	0.70	69	0.20	3.2	750	0.42	41	1.5/450
		CONT	140		0.26	25	0.14	1.2		0.16	16	
		5MIN	220	60	0.70	69	0.20	3.2	900	0.38	37	1.2/450
		CONT	140		0.26	25	0.14	1.2		0.11	11	
3TK6A-C	3TK6GN-C	5MIN	220	50	1.37	134	0.23	6.0	750	0.82	80	2.0/450
		CONT	140		0.69	68	0.17	2.5		0.37	36	
		5MIN	220	60	1.37	134	0.23	6.5	900	0.76	74	1.5/450
		CONT	140		0.69	68	0.17	2.8		0.31	30	
4TK10A-C	4TK10GN-C	5MIN	220	50	2.70	265	0.41	10	750	1.30	127	2.5/450
		CONT	140		1.00	98	0.26	3.0		0.47	46	
		5MIN	220	60	2.30	225	0.38	10	900	1.30	127	2.0/450
		CONT	140		0.92	90	0.25	3.0		0.39	38	
5TK20A-C	5TK20GN-C	5MIN	220	50	3.70	363	0.44	20	750	2.90	224	3.5/450
		CONT	140		1.40	137	0.29	6.0		0.78	76	
		5MIN	220	60	3.00	294	0.45	26	900	2.20	216	3.0/450
		CONT	140		1.10	108	0.34	6.0		0.65	64	
5TK40A-CF	5TK40GU-CF	5MIN	220	50	6.40	627	0.95	40	750	5.20	510	6.0/450
		CONT	140		2.80	274	0.49	15		1.95	191	
		5MIN	220	60	7.70	755	0.99	40	900	5.06	490	6.0/450
		CONT	140		3.50	343	0.56	15		1.84	180	

MODEL DESCRIPTION OF MOTOR AND REDUCER

DESCRIPTION OF MOTOR MODEL

F	5	D	90	-	24	GN	-	30S
	Model & Dimension	Mototr Series	Output Power		Voltage	Shape of Motor Shaft		Speed
	2: 60mm		6: 6W		12: 12V			30S: 3000RPM
	3: 70mm	DC Motor	10: 10W		24: 24V	A: Flat type		20S: 2000RPM
	4: 80mm		15: 15W		90: 90V			18S: 1800RPM
	5: 90mm		25: 25W		110: 110V	A1: Milling Keyway		
	6: 104mm C55:		40: 40W		180: 180V			
			60: 60W		220: 220V	GN: General Helical Gear		
			90: 90W			GU: Reinforced Helical Gear		
			120: 120W					
			150: 150W					

DESCRIPTION OF REDUCER MODEL

5	GN	50	K
Model & Dimension	Gear Type	Reduction Ratio	Bearing Type
2: 60mm	GN: Common Helical Gear	50: Reduction Ratio 1 : 50	K: Ball Bearing (Mark KB for Type GU square case)
3: 70mm			
4: 80mm	GU: Reinforced Helical Gear		
5: 90mm			
6: 104mm			

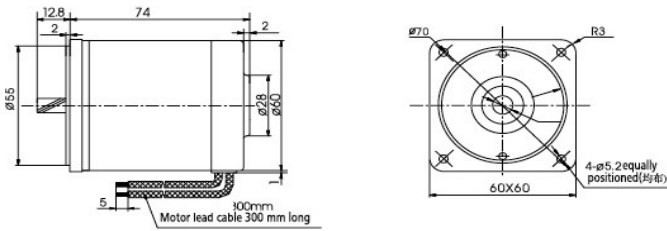
●Note: The code of the non-standard split type is to add "V" before the model number of the motor or reducer (Please specify the detailed parameter requirement in the purchase order).

GENERAL SPECIFICATION OF DC MOTOR

Items	contents
Insulation resistance	In the circumstance of normal temperature and humidity, the resistance can be up to 100MΩ, measured by DC 500V insulation resistance measurer between the motor wiring and motor shell while the motor is working.
Insulation voltage	In the circumstance of normal temperature and humidity, there will be no problem supplying the power of 1500V 50/60Hz between the metal wiring and motor shell in 1minute while the motor is working.
Temperature rise	The temperature rise should be lower than 80 °C measured by resistance method when the motor is working.
Insulation class	Class B (130 °C)
Using temperature	-10 °C~+40 °C (No freeze)
Using humidity	≤85% (Place without dew)

DESCRIPTION OF ALLOWABLE TORQUE ON GEARBOX

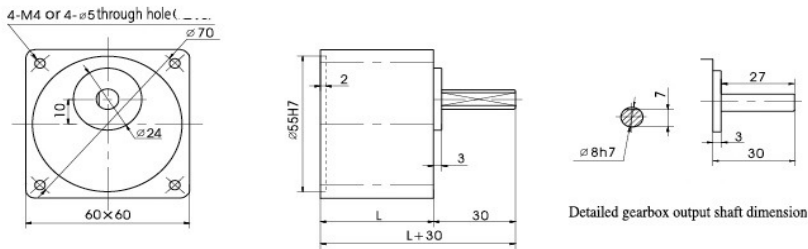
- The speed reducer is fully closed and immersion lubricated so that grease is not easy to dry. ●□in the type of gearbox indicates reduction ratio. ●A reliable state-of-the-art "integrated" speed reducer is used, which integrates bearing case and reducer case into one and full ball bearings are used. ●The gray color of the form indicates the same rotating direction as the motor while the rotating direction of others is opposite.
- The output shaft speed excludes the motor speed slip. The actual speed will be 2-20% lower than the above value depending upon the load.



MOTOR PERFORMANCE PARAMETERS

Model	Voltage V	Power W	No-load Parameters		Load Parameters			Brush Life H	Motor Weight kg	Remarks
			Speed RPM	Current A	Speed RPM	Torque kg.cm	Current A			
F2D6-12□	12	6	3200	0.6	2950	0.2	0.8	3000	0.6	
F2D6-24□	24	6	3200	0.3	2950	0.2	0.5	3000	0.6	
F2D6-90□	90	6	3000	0.2	2800	0.2	0.3	3000	0.6	
F2D10-12□	12	10	3200	1.0	2800	0.35	2.0	3000	0.7	
F2D10-24□	24	10	3300	0.5	3000	0.35	0.9	3000	0.7	
F2D10-90□	90	10	3200	0.3	2800	0.35	0.6	3000	0.7	

OVERALL DIMENSION OF GEARBOX



	Reduction Ratio	L(mm)	(kg)
Gearbox	2GN3K-GN18K	32	0.24
	2GN20K-GN50K	42	0.30
	2GN60K-GN200K		0.33

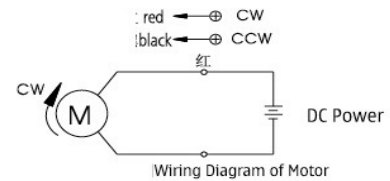
ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 2GN□K

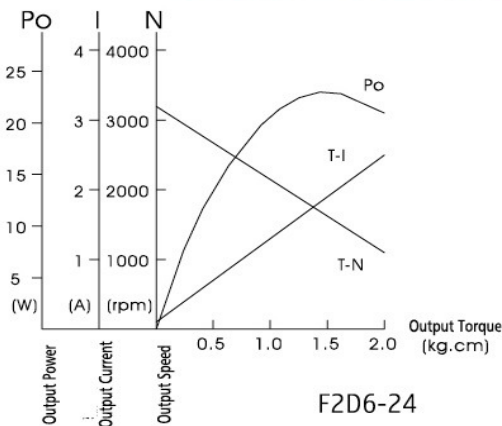
Mode	Reduction Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60
F2D10-24□	Output Shaft Speed	r/min	1067	889	640	533	427	356	320	256	213	178	160	128	107	89	80	64	53
	Allowable Torque	N.m	0.04	0.05	0.07	0.09	0.11	0.13	0.15	0.18	0.22	0.26	0.26	0.33	0.39	0.47	0.52	0.65	0.71
		kgf.cm	0.44	0.53	0.74	0.89	1.11	1.33	1.48	1.85	2.22	2.66	2.68	3.33	4.00	4.80	5.34	6.67	7.24

Model of Gearbox: 2GN□K

Mode	Reduction Ratio		75	90	100	120	150	180	200
F2D10-24□	Output Shaft Speed	r/min	43	36	32	27	21	18	16
	Allowable Torque	N.m	0.89	1.06	1.18	1.42	1.77	2.13	2.36
		kgf.cm	9.04	10.85	12.06	14.47	18.09	21.71	24.12

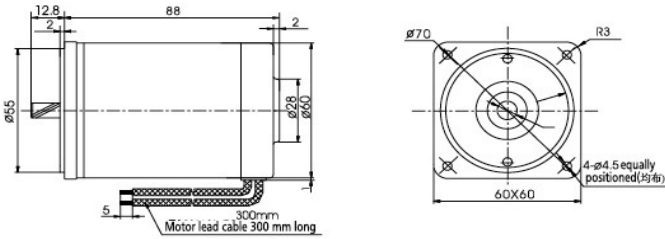


CHARACTERISTIC CURVE OF MOTOR



BARE MOTOR OUTPUT SHAFT DIMENSION

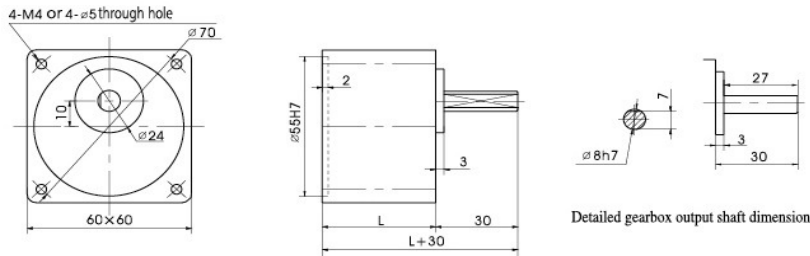
Motor	Gear Shaft DC2GN6-□ DC2GN10-□	Flat type DC2A6-□ DC2A10-□
Output Shaft Type and Dimension		



MOTOR PERFORMANCE PARAMETERS

Model	Voltage V	Power W	No-load Parameters		Load Parameters			Brush Life H	Motor Weight kg	Remarks
			Speed RPM	Current A	Speed RPM	Torque kg.cm	Current A			
F2GN15-12□	12	15	3200	0.8	2950	0.5	2.0	3000	0.9	
F2GN15-24□	24	15	3300	0.4	3000	0.5	1.0	3000	0.9	
F2GN15-90□	90	15	3200	0.2	3000	0.5	0.4	3000	0.9	

OVERALL DIMENSION OF GEARBOX



Gearbox	Reduction Ratio	L(mm)	(kg)
	2GN3K-GN18K	32	0.24
	2GN20K-GN50K	42	0.30
	2GN60K-GN200K		0.33

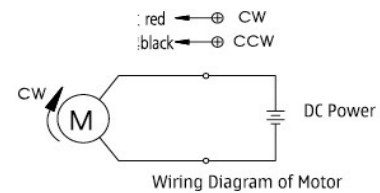
ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 2GN□K

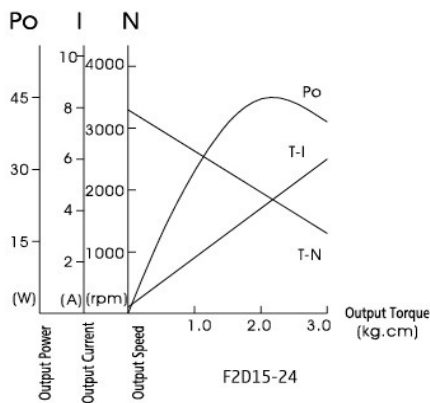
Mode	Reduction Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60
			F2D15-24□	Output Shaft Speed	r/min	1100	917	660	550	440	367	330	264	220	183	165	132	110	92
	Allowable Torque	N.m	0.11	0.13	0.176	0.21	0.26	0.32	0.35	0.44	0.53	0.63	0.63	0.73	0.95	1.14	1.27	1.59	1.72
		kgf.cm	1.08	1.29	1.79	2.15	2.69	3.23	3.59	4.48	5.38	6.46	6.47	8.08	9.70	11.64	12.93	16.17	17.54

Model of Gearbox: 2GN□K

Mode	Reduction Ratio		75	90	100	120	150	180	200
			F2D15-24□	Output Shaft Speed	r/min	44	37	33	28
	Allowable Torque	N.m	2.15	2.58	2.87	2.94	2.94	2.94	2.94
		kgf.cm	21.93	26.31	29.23	30.0	30.0	30.0	30.0

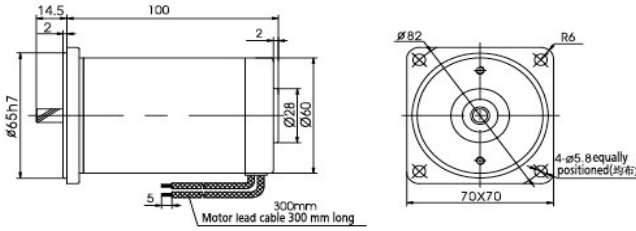


CHARACTERISTIC CURVE OF MOTOR



BARE MOTOR OUTPUT SHAFT DIMENSION

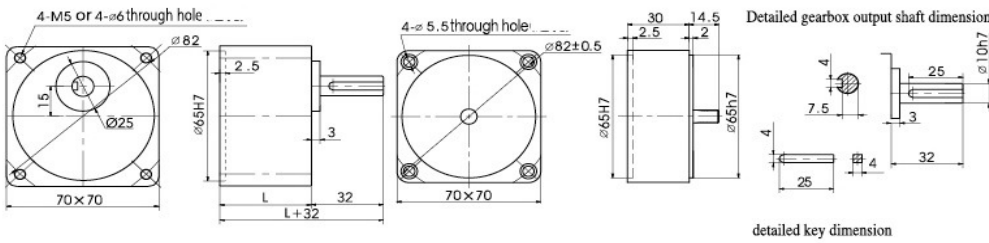
Motor	DC2GN15-□	Flat type DC2A15-□
Output Shaft Type and Dimension		



MOTOR PERFORMANCE PARAMETERS

Model	Voltage	Power	No-load Parameters		Load Parameters			Brush Life	Motor Weight	Remarks
			Speed	Current	Speed	Torque	Current			
			RPM	A	RPM	kg.cm	A			
F3GN20-90□	90	20	3150	0.2	2800	0.70	0.50	3000	1.0	
F3GN25-12□	12	25	3300	1.0	3000	0.80	3.50	3000	1.0	
F3GN25-24□	24	25	3200	0.5	2800	0.87	1.60	3000	1.0	

OVERALL DIMENSION OF GEARBOX



	Reduction Ratio	L(mm)	kg
Gearbox	3GN3K-GN15K	32	0.38
	3GN18K-GN50K	42	0.47
	3GN60K-GN200K		0.52
Intermediate Gearbox	3GN10X	30	0.38

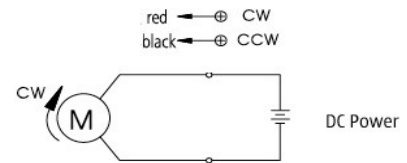
ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 3GN□K

Mode	Reduction Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50
F3D25-24□	Output Shaft Speed	r/min	1067	889	640	533	427	356	320	256	213	178	160	128	107	89	80	64
		N.m	0.21	0.25	0.34	0.41	0.52	0.62	0.69	0.86	1.03	1.24	1.24	1.56	1.87	2.24	2.49	3.11
		kgf.cm	2.1	2.6	3.5	4.2	5.3	6.3	7.0	8.8	10.5	12.6	12.6	15.9	19.1	22.8	25.4	31.7

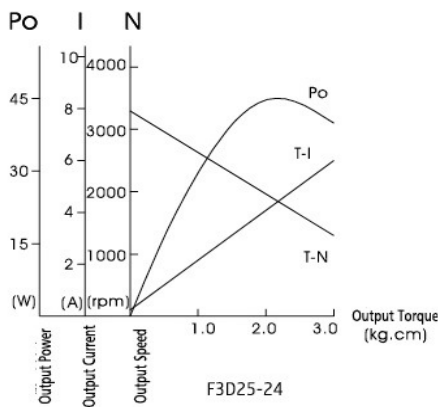
Model of Gearbox: 2GN□K

Mode	Reduction Ratio		60	75	90	100	120	150	180	200
F3D25-24□	Output Shaft Speed	r/min	53	43	36	32	27	21	18	16
		N.m	3.38	4.22	4.90	4.90	4.90	4.90	4.90	4.90
		kgf.cm	34.5	43.1	50	50	50	50	50	50



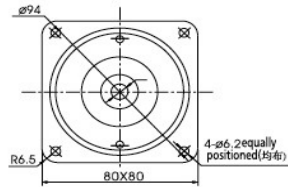
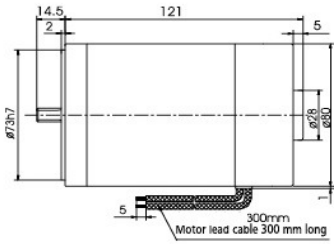
Wiring Diagram of Motor

CHARACTERISTIC CURVE OF MOTOR



BARE MOTOR OUTPUT SHAFT DIMENSION

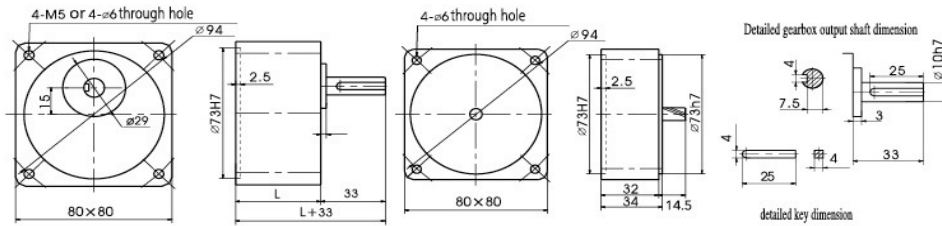
Motor	Gear Shaft DC3GN20-□ DC3GN25-□	Flat type DC3A20-□ DC3A25-□
Output Shaft Type and Dimension		



LIST OF MOTOR CHARACTERISTICS

Model	Voltage V	Power W	No-load Parameters		Load Parameters			Brush Life H	Motor Weight kg	Remarks
			Speed RPM	Current A	Speed RPM	Torque kg.cm	Current A			
F4D25-12□	12	25	3200	1.4	3100	0.8	3.6	3000	1.7	
F4D25-24□	24	25	3000	0.7	2850	0.9	1.7	3000	1.7	
F4D25-90□	90	25	3200	0.2	3000	0.8	0.5	3000	1.7	
F4D40-12□	12	40	3100	2.0	2800	1.4	5.2	3000	1.8	
F4D40-24□	24	40	3100	0.8	3000	1.3	2.1	3000	1.8	
F4D40-90□	90	40	3200	0.3	3000	1.3	0.7	3000	1.8	

OVERALL DIMENSION OF GEARBOX



	Reduction Ratio	L(mm)	(kg)
Gearbox	4GN3K-GN20K	32	0.43
	4GN25K-GN50K	43.5	0.57
	4GN60K-GN200K		0.61
Intermediate Gearbox	4GN10X	32	0.43

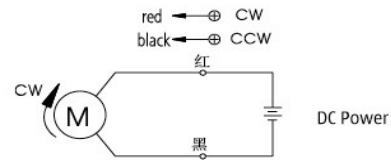
ALLOWABLE TORQUE ON GEARBOX

:Model of Gearbox: 4GN□K

Mode	Reduction Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	
F4D40-24□	Output Shaft Speed	r/min	1033	861	620	517	413	344	310	248	207	172	155	124	103	86	78	62	52	
		Allowable Torque	N.m	0.30	0.36	0.50	0.60	0.75	0.90	1.00	1.25	1.50	1.80	2.00	2.25	2.70	3.24	3.60	4.50	4.88
			kgf.cm	3.06	3.67	5.09	6.1	7.64	9.17	10.2	12.73	15.28	18.33	20.36	22.95	27.54	33.04	36.71	45.90	49.80

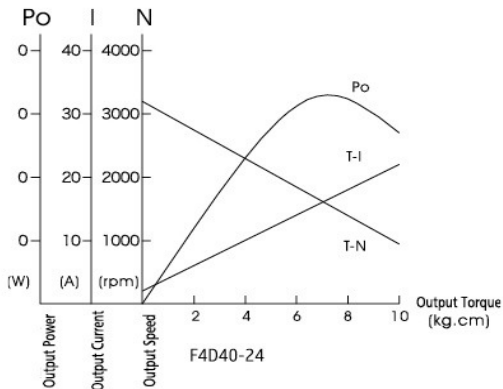
Model of Gearbox: 4GN□K

Mode	Reduction Ratio		75	90	100	120	150	180	200	
F4D40-24□	Output Shaft Speed	r/min	41	34	31	26	21	17	16	
		Allowable Torque	N.m	6.10	7.32	7.84	7.84	7.84	7.84	7.84
			kgf.cm	62.24	74.69	80.00	80.00	80.00	80.00	80.00



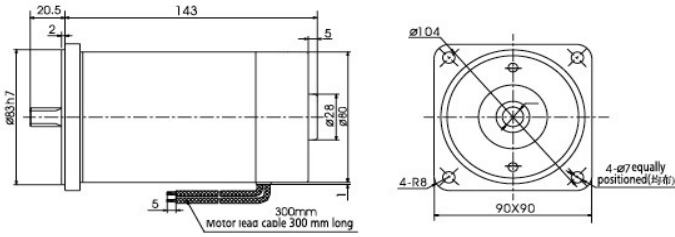
Wiring Diagram of Motor

CHARACTERISTIC CURVE OF MOTOR



BARE MOTOR OUTPUT SHAFT DIMENSION

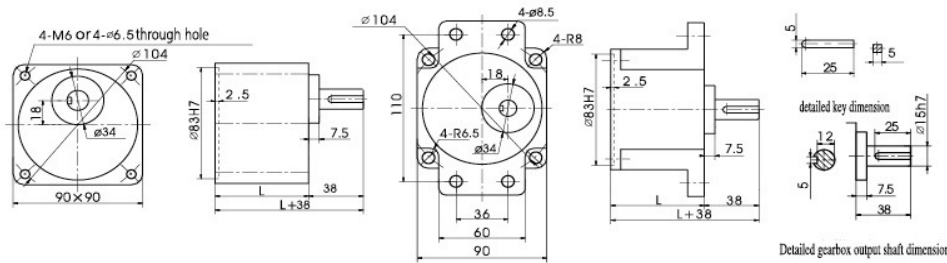
Motor	Gear Shaft DC4GN25-□ DC4GNZ4D40-□	Flat type DC4A25-□ DC4A40-□
Output Shaft Type and Dimension		



LIST OF MOTOR CHARACTERISTICS

Model	Voltage	Power	No-load Parameters		Load Parameters			Brush Life	Motor Weight	Remarks
			Speed	Current	Speed	Torque	Current			
			RPM	A	RPM	kg.cm	A			
F5D60-12□	12	60	3000	2.0	2600	2.3	9.0	3000	2.2	
F5D60-24□	24	60	3100	1.0	2800	2.1	3.5	3000	2.2	
F5D60-90□	90	60	3100	0.3	2900	2.0	1.0	3000	2.2	
F5D90-12□	12	90	3100	2.0	2600	3.4	12.0	3000	2.2	
F5D90-24□	24	90	3300	1.0	2800	3.2	5.0	3000	2.2	
F5D90-90□	90	90	3000	0.3	2800	3.2	1.4	3000	2.2	
F5D120-12□	12	120	3100	2.0	2500	4.7	15.0	3000	2.2	
F5GD120-24□	24	120	3200	1.2	2600	4.5	7.0	3000	2.2	
F5D120-90□	90	120	3000	0.3	2600	4.5	2.0	3000	2.2	

OVERALL DIMENSION OF GEARBOX



Gearbox	Reduction Ratio	L(mm)	(kg)
	5GU3K-GU9K	65	1.21
5GU10K-GU18K	65	1.30	
5GU20K-GU75K	65	1.40	
5GU90K-GU200K	65	1.45	

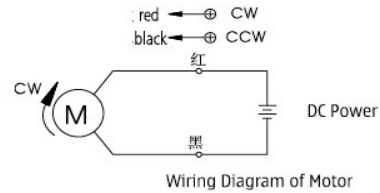
ALLOWABLE TORQUE ON GEARBOX

Model of Gearbox: 5GU□K

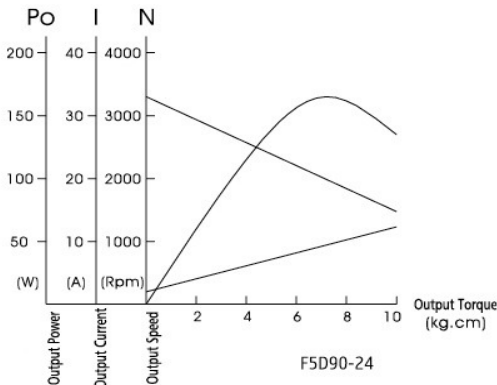
Mode	Reduction Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60
			F5D90-24□	Output Shaft Speed	r/min	1100	916	660	550	440	366	330	264	220	183	165	132	110	91
	Allowable torque	N.m	0.64	0.76	1.05	1.27	1.58	1.90	1.90	2.38	2.85	3.42	3.44	4.30	5.16	6.19	6.88	8.60	10.31
		kgf.cm	6.53	7.75	10.76	12.92	16.12	19.37	19.40	24.25	29.10	34.92	35.08	43.85	52.62	63.15	70.16	87.70	105.24

Model of Gearbox: 5GU□K

Mode	Reduction Ratio		75	90	100	120	150	180	200
			F5D90-24□	Output Shaft Speed	r/min	44	36	33	27
	Allowable Torque	N.m	12.89	13.83	15.37	18.44	19.60	19.60	19.60
		kgf.cm	131.56	141.12	156.80	188.17	200.0	200.0	200.0

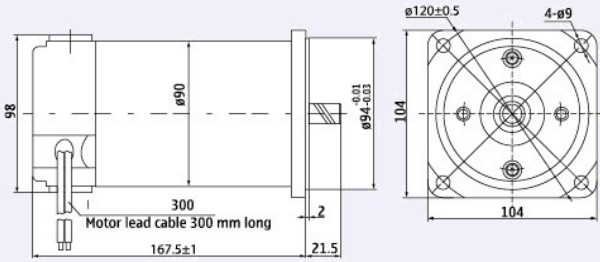


CHARACTERISTIC CURVE OF MOTOR



BARE MOTOR OUTPUT SHAFT DIMENSION

Motor	Gear Shaft DC5GU90-□	Flat type DC5A90-□	Milling keyway DC5A190-□
Output Shaft Type and Dimension			

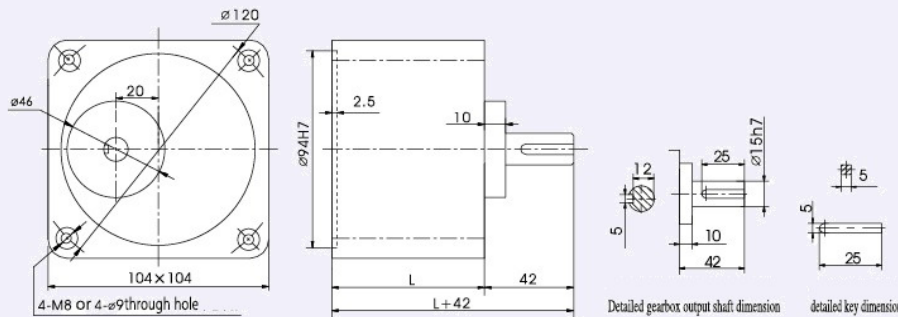


MOTOR PERFORMANCE PARAMETERS

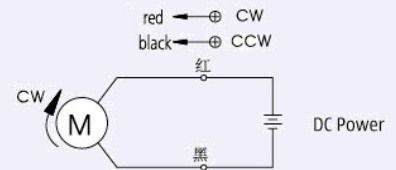
Model	Voltage V	Out put Power W	No-load Parameters		Load Parameters			Brush Life H	Motr Weight Kg
			Speed r/min	Current A	Speed r/min	Torque mN.m	Current A		
F6D250-24□	24	250	3400	3.0 Max	3000	796	16.0	2000	3.2
F6D250-90□	90	250	3300	1.2 Max	3000	796	4.0	2000	3.2
F6D250-220□	220	250	3300	0.9 Max	3000	796	2.0	2000	3.2

● Motor voltage, power and speed will be customized accrding to his requestment under the allowed circumstance of adoptable dimension.

OVERALL DIMENSION OF GEARBOX



	Reduction Ratio	L(mm)	(kg)
Gearbox	6GU3K-GU9K	72	1.87
	6GU10K-GU18K		2.10
	6GU20K-GU200K		2.75
Motor			5.68

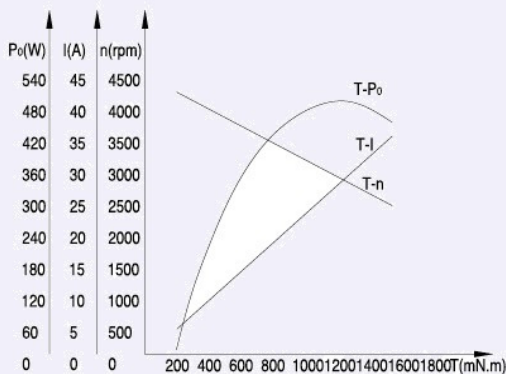


Wiring Diagram of Motor

Allowance Torque Unit: Upside (N.m) / Belowside (kgf.cm)

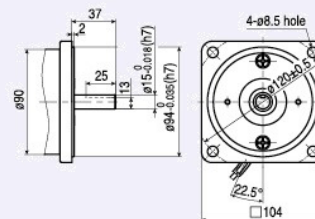
Type	Gear Ratio	Speed r/min																				
		3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	200
F6D250-24GU	6GU□K	1.93	2.32	3.22	3.86	4.83	5.80	7.20	8.70	10.4	13.1	15.7	18.9	26.2	31.5	40.0	40.0	40.0	40.0	40.0	40.0	40.0
		19.7	23.6	32.8	39.4	49.3	59.2	74.1	88.9	106	133	160	192	267	400	400	400	400	400	400	400	400

Characteristic Curve of Motor



Shaft Section of Round Shaft Type

Excluding weight and the shaft section Motor shape are the same as those of the pinion shaft



MODEL DESCRIPTION OF MOTOR AND REDUCER

BC SERIES EXPLANATION

F	5	B	15	-	24	GN	-	30S
Model & Dimension	Mototr Series	Output Power	Voltage	Shape of Motor Shaft	Speed			
2: 60mm		15: 15W	12: 12V		30s: 3000RPM			
3: 70mm	BRUSHLESS	30: 30W	24: 24V	A: Flat type	20s: 2000RPM			
4: 80mm	DC MOTOR	60: 60W	48: 48V	A1: Milling Keyway	18s: 1800RPM			
5: 90mm		80: 80W	220: 220VAC					
6: 104mm C55:		120: 120W		GN: General Helical Gear				
		180: 180W		GU: Reinforced Helical Gear				
		200: 200W						
		300: 300W						
		400: 400W						

DESCRIPTION OF REDUCER MODEL

5	GN	50	K
Model & Dimension	Gear Type	Reduction Ratio	Bearing Type
2: 60mm	GN: Common Helical Gear	50: Reduction Ratio 1 : 50	K: Ball Bearing (Mark KB for Type GU square case)
3: 70mm			
4: 80mm	GU: Reinforced Helical Gear		
5: 90mm			

●Note: The code of the non-standard split type is to add "V" before the model number of the motor or reducer (Please specify the detailed parameter requirement in the purchase order).

NOTE

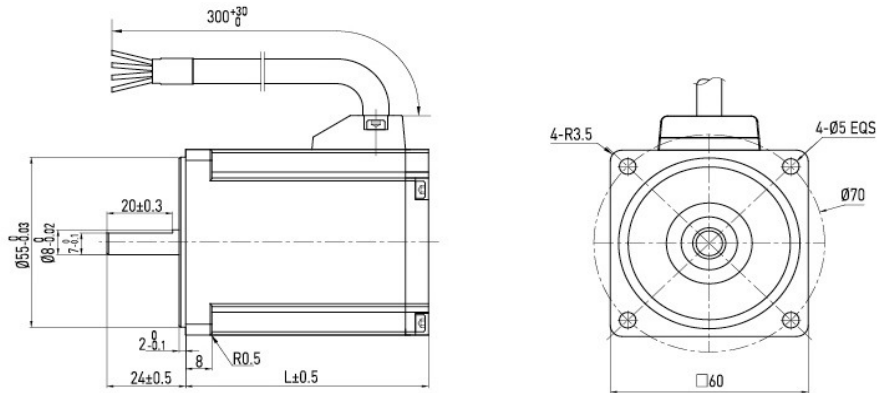
- BC series is a standard brushless DC motor. It comes from tens of years experience in production and research. It can replace AC gear motor and DC gear motor perfectly. It's easy to use and have compact structure. There're 2 ways of assembly, through hole and not through hole. We can supply customized shaft. Please check other parameters in P58-P63.
- Protection class :IP40 ■ The life time of BC is 5000h. The life time above are in the condition of specified speed in catalog.
- BC series is black which is electrophoretic paint. FTG company will take charge of damage during transport. Customer needs to response the issue in 7days after they receive it.
- Customer needs to use the product according to the manual/instruction of catalog. Please read the note there carefully before you use. We support guarantee as GB rules. FTG company will change the motor for you if the motor fails in 7 days in right way of use.
- Please note, the standard direction of motor is CCW from shaft side which is same as gearbox output shaft.
- The driver is BX series which is outer driver. ■ We have CE certification for high/low voltage product.



60 MOTOR DATA

Type	Voltage	Power	Rated Torque	No load Speed	No load Current	Rated Speed	Rated Current	Hall(Y/N)	Life(Hours)	Length	Internal Drive	Weight
F2B15-12GN-20S	12V	15W	0.072N.M	2800RPM	< 0.8A	2000RPM	1.56A	Both	> 5000	59mm	YES	800g
F2B15-24GN-20S	24V	15W	0.072N.M	2800RPM	< 0.5A	2000RPM	0.78A	Both	> 5000	59mm	YES	800g
F2B15-12GN-310S	310V	15W	0.072N.M	2700RPM	< 0.3A	2000RPM	0.06A	Both	> 5000	59mm	YES	800g
F2B30-12GN-20S	12V	30W	0.143N.M	2800RPM	< 0.9A	2000RPM	3.13A	Both	> 5000	64mm	YES	900g
F2B30-24GN-20S	24V	30W	0.143N.M	2800RPM	< 0.5A	2000RPM	1.56A	Both	> 5000	64mm	YES	900g
F2B30-310GN-20S	310V	30W	0.143N.M	2700RPM	< 0.3A	2000RPM	0.12A	Both	> 5000	64mm	YES	900g
F2B60-24GN-20S	24V	60W	0.287N.M	2800RPM	< 0.5A	2000RPM	3.13A	Both	> 5000	74mm	YES	1200g
F2B60-310GN-20S	310V	60W	0.287N.M	2700RPM	< 0.3A	2000RPM	0.24A	Both	> 5000	74mm	YES	1200g

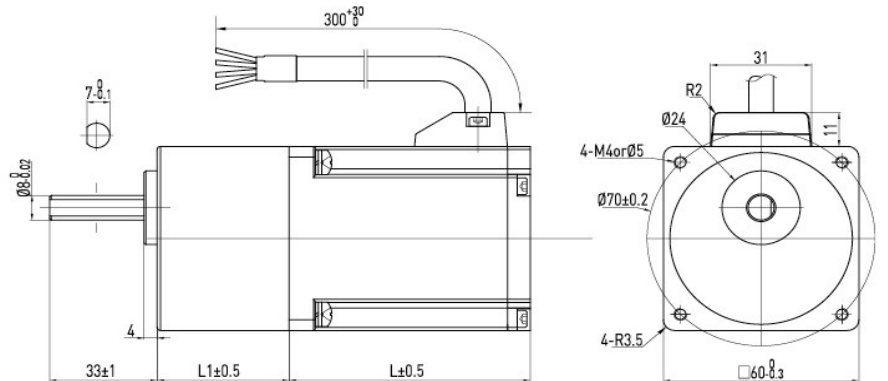
DIMENSIONAL DRAWING



60 GEAR BOX

Allowance Torque Unit: N.m

Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	200
Output speed	667	556	400	333	267	222	160	133	111	80	67	56	40	33	27	22	20	17	13	11	10
Allowance Torque	0.19	0.23	0.32	0.39	0.48	0.58	0.81	0.97	1.16	1.45	1.74	2.09	2.63	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

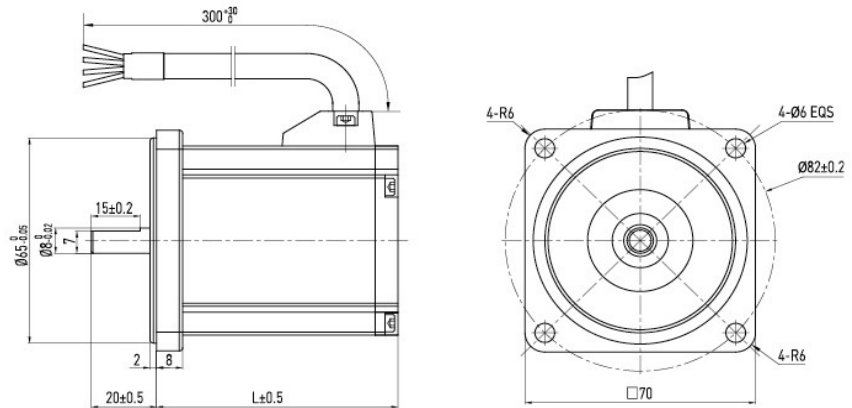




60 MOTOR DATA

Type	Voltage	Power	Rated Torque	No load Speed	No load Current	Rated Speed	Rated Current	Hall(Y/N)	Life(Hours)	Length	Internal Drive	Weight
F2B15-12GN-20S	12V	15W	0.072N.M	2800RPM	< 0.8A	2000RPM	1.56A	Both	> 5000	59mm	YES	800g
F2B15-24GN-20S	24V	15W	0.072N.M	2800RPM	< 0.5A	2000RPM	0.78A	Both	> 5000	59mm	YES	800g
F2B15-12GN-310S	310V	15W	0.072N.M	2700RPM	< 0.3A	2000RPM	0.06A	Both	> 5000	59mm	YES	800g
F2B30-12GN-20S	12V	30W	0.143N.M	2800RPM	< 0.9A	2000RPM	3.13A	Both	> 5000	64mm	YES	900g
F2B30-24GN-20S	24V	30W	0.143N.M	2800RPM	< 0.5A	2000RPM	1.56A	Both	> 5000	64mm	YES	900g
F2B30-310GN-20S	310V	30W	0.143N.M	2700RPM	< 0.3A	2000RPM	0.12A	Both	> 5000	64mm	YES	900g
F2B60-24GN-20S	24V	60W	0.287N.M	2800RPM	< 0.5A	2000RPM	3.13A	Both	> 5000	74mm	YES	1200g
F2B60-310GN-20S	310V	60W	0.287N.M	2700RPM	< 0.3A	2000RPM	0.24A	Both	> 5000	74mm	YES	1200g

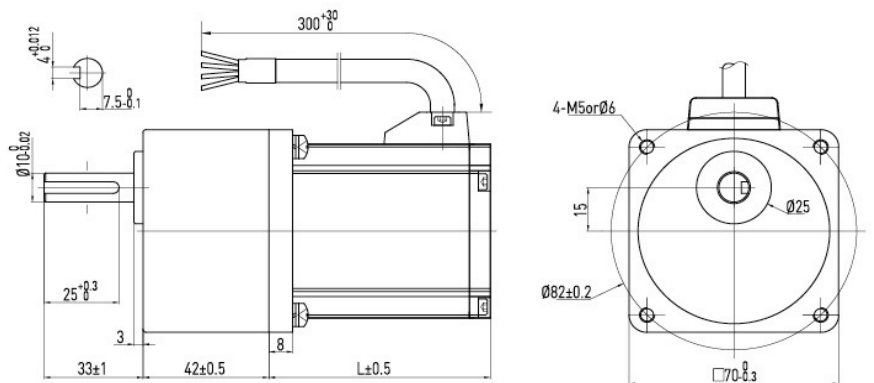
DIMENSIONAL DRAWING



70 GEAR BOX

Allowance Torque Unit: N.m

Reduction 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
Output Speed	r/min	667	556	400	333	267	222	320	160	133	111	100	80	67	56	50	40	33	27	22	20	17	13	11	10
Allowable Torque	N.m	0.21	0.25	0.34	0.41	0.52	0.62	0.69	0.86	1.03	1.24	1.24	1.56	1.87	2.24	2.49	3.11	3.38	4.22	4.90	4.90	4.90	4.90	4.90	4.90

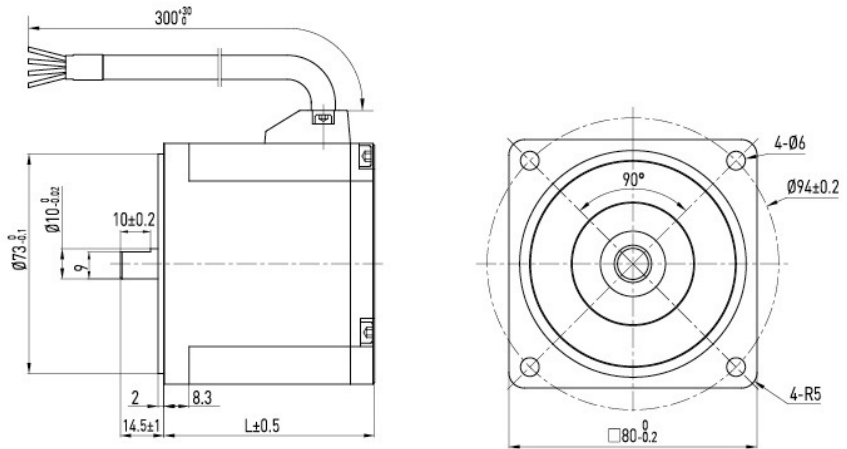




80 MOTOR DATA

Type	Voltage	Power	Rated Torque	No load Speed	No load Current	Rated Speed	Rated Current	Hall(Y/N)	Life(Hours)	Length	Internal Drive	Weight
F4B80-24GN-205	24V	80W	0.382N.M	2700RPM	< 0.8A	2000RPM	0.17A	Both	> 5000	70mm	NO	1600g
F4B80-310GN-205	310V	80W	0.382N.M	2600RPM	< 0.4A	2000RPM	0.32A	Both	> 5000	70mm	NO	1600g
F4B120-24GN-205	24V	120W	0.573N.M	2700RPM	< 0.8A	2000RPM	6.25A	Both	> 5000	75mm	NO	1700g
F4B120-310GN-205	310V	120W	0.573N.M	2600RPM	< 0.4A	2000RPM	0.48A	Both	> 5000	75mm	NO	1700g
F4B180-24GN-205	24V	180W	0.86N.M	2700RPM	< 0.8A	2000RPM	9.38A	Both	> 5000	80mm	NO	1800g
F4B180-310GN-205	310V	180W	0.86N.M	2600RPM	< 0.4A	2000RPM	0.73A	Both	> 5000	80mm	NO	1800g

DIMENSIONAL DRAWING

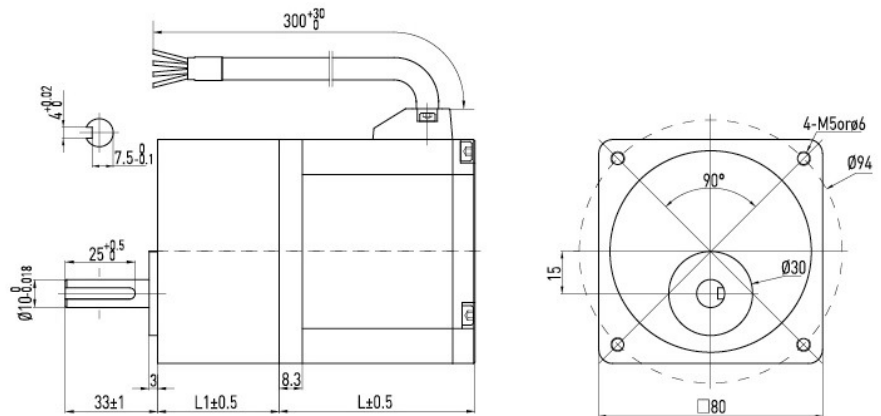


80 GEAR BOX

Allowance Torque Unit: N.m

Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	200
Output speed r/min	667	556	400	333	267	222	160	133	111	80	67	56	40	33	27	22	20	17	13	11	10
Allowance Torque N.m	0.31	0.37	0.52	0.62	0.77	0.93	1.29	1.55	1.86	2.32	2.79	3.35	4.2	5.04	6.3	7.56	8.0	8.0	8.0	8.0	8.0

DIMENSIONAL DRAWING

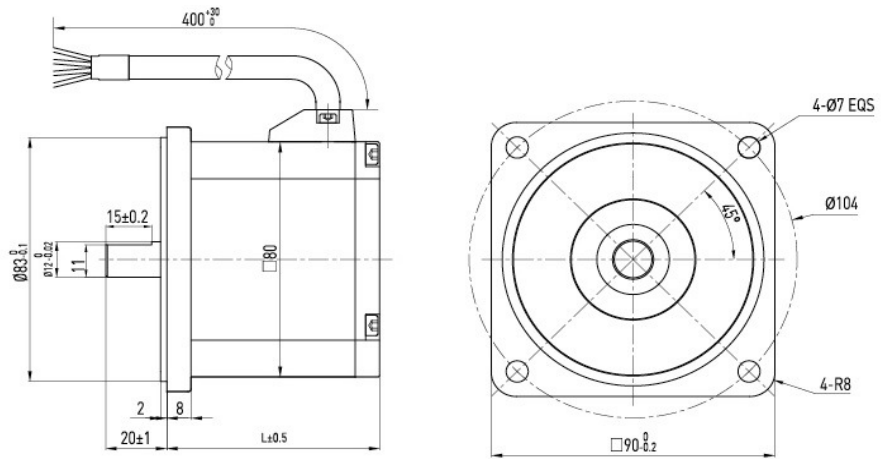




80 MOTOR DATA

Type	Voltage	Power	Rated Torque	No load Speed	No load Current	Rated Speed	Rated Current	Hall(Y/N)	Life[Hours]	Length	Internal Drive	Weight
F4B80-24GN-20S	24V	80W	0.382N.M	2700RPM	< 0.8A	2000RPM	0.17A	Both	> 5000	70mm	NO	1600g
F4B80-310GN-20S	310V	80W	0.382N.M	2600RPM	< 0.4A	2000RPM	0.32A	Both	> 5000	70mm	NO	1600g
F4B120-24GN-20S	24V	120W	0.573N.M	2700RPM	< 0.8A	2000RPM	6.25A	Both	> 5000	75mm	NO	1700g
F4B120-310GN-20S	310V	120W	0.573N.M	2600RPM	< 0.4A	2000RPM	0.48A	Both	> 5000	75mm	NO	1700g
F4B180-24GN-20S	24V	180W	0.86N.M	2700RPM	< 0.8A	2000RPM	9.38A	Both	> 5000	80mm	NO	1800g
F4B180-310GN-20S	310V	180W	0.86N.M	2600RPM	< 0.4A	2000RPM	0.73A	Both	> 5000	80mm	NO	1800g

DIMENSIONAL DRAWING

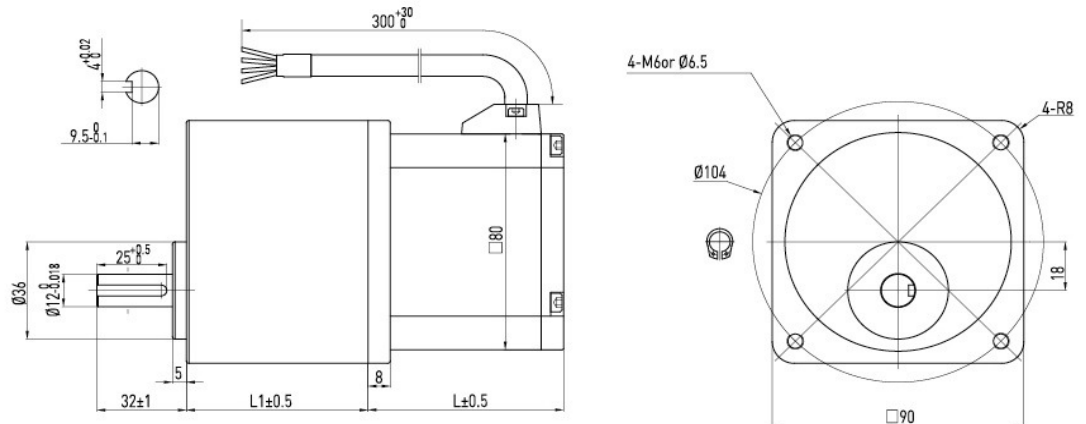


90 GEAR BOX

Allowance Torque Unit: N.m

Reduction Ratio		3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	200
Output Speed	r/min	667	556	400	333	267	222	160	133	111	80	67	56	40	33	27	22	20	17	13	11	10
Allowable Torque	N.m	0.7	0.84	1.16	1.39	1.74	2.09	2.61	3.14	3.76	4.73	5.67	6.81	9.45	11.35	14.18	15.21	16.9	20	20	20	20

DIMENSIONAL DRAWING

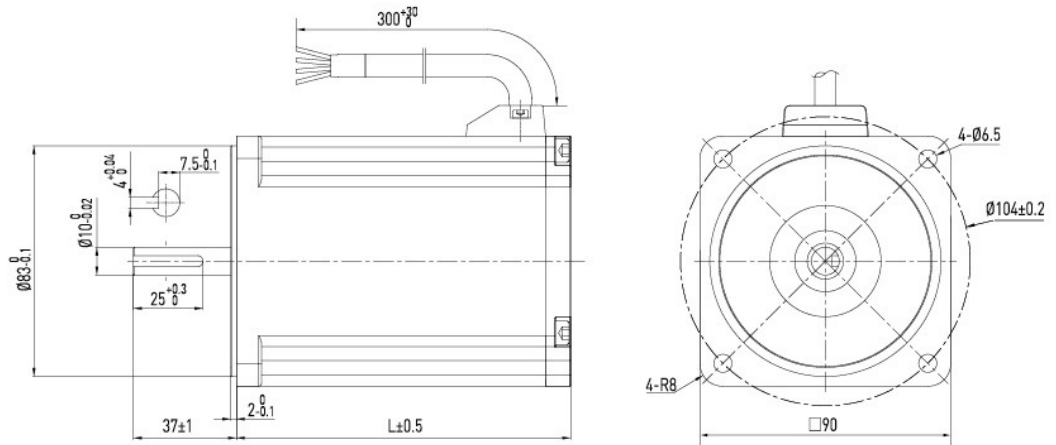




90 MOTOR DATA

Type	Voltage	Power	Rated Torque	No load Speed	No load Current	Rated Speed	Rated Current	Hall(Y/N)	Life(Hours)	Length	Internal Drive	Weight
F5B100-24GN-20S	24V	100W	0.478N.M	2700RPM	< 0.6A	2000RPM	5.21A	Both	> 5000	75mm	NO	1700g
F5B100-310GN-20S	310V	100W	0.478N.M	2600RPM	< 0.4A	2000RPM	0.4A	Both	> 5000	75mm	NO	1700g
F5B200-24GN-20S	24V	200W	0.955N.M	2700RPM	< 0.8A	2000RPM	10.42A	Both	> 5000	90mm	NO	2100g
F5B200-310GN-20S	310V	200W	0.955N.M	2600RPM	< 0.6A	2000RPM	0.81A	Both	> 5000	90mm	NO	2100g
F5B400-24GN-20S	24V	400W	1.91N.M	2700RPM	< 1.8A	2000RPM	20.83A	Both	> 5000	105mm	NO	2300g
F5B400-310GN-20S	310V	400W	1.91N.M	2600RPM	< 1.2A	2000RPM	1.61A	Both	> 5000	105mm	NO	2300g

DIMENSIONAL DRAWING

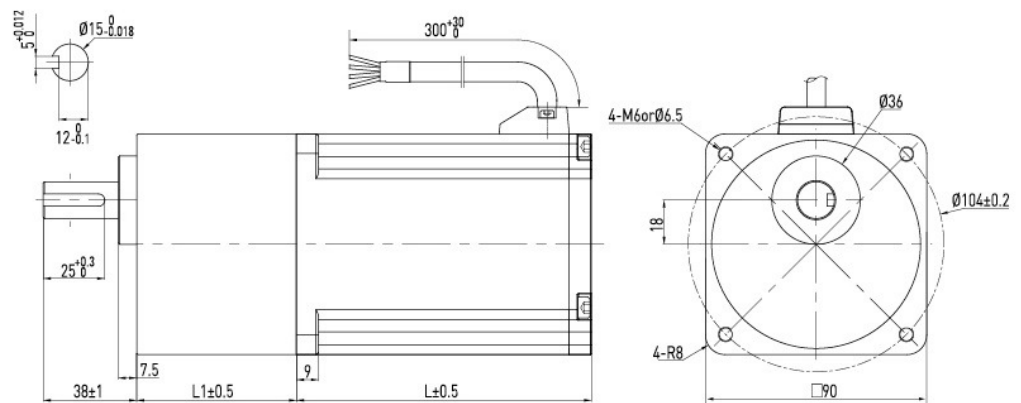


90 GEAR BOX

Allowance Torque Unit: N.m

Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	200
r/min	667	556	400	333	267	222	200	160	133	111	80	67	56	40	33	27	22	20	17	13	11	10
N.m	0.7	0.84	1.16	1.39	1.74	2.09	2.26	2.61	3.14	3.76	4.73	5.67	6.81	9.45	11.35	14.18	15.21	16.9	20	20	20	20

DIMENSIONAL DRAWING

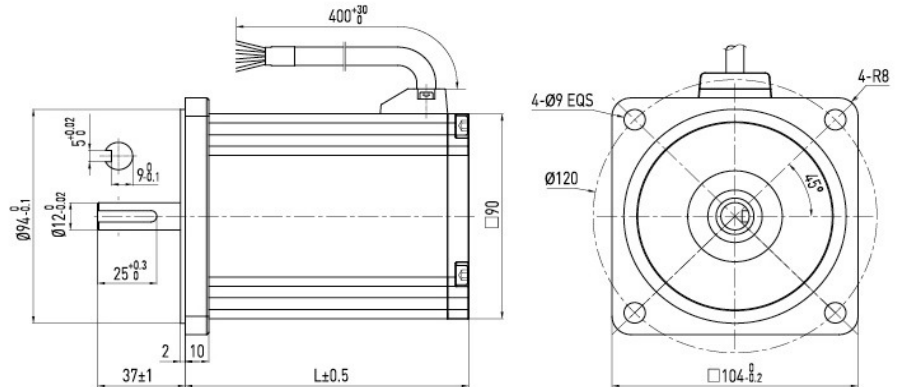




90 MOTOR DATA

Type	Voltage	Power	Rated Torque	No load Speed	No load Current	Rated Speed	Rated Current	Hall(Y/N)	Life(Hours)	Length	Internal Drive	Weight
F5B100-24GN-20S	24V	100W	0.478N.M	2700RPM	< 0.6A	2000RPM	5.21A	Both	> 5000	75mm	NO	1700g
F5B100-310GN-20S	310V	100W	0.478N.M	2600RPM	< 0.4A	2000RPM	0.4A	Both	> 5000	75mm	NO	1700g
F5B200-24GN-20S	24V	200W	0.955N.M	2700RPM	< 0.8A	2000RPM	10.42A	Both	> 5000	90mm	NO	2100g
F5B200-310GN-20S	310V	200W	0.955N.M	2600RPM	< 0.6A	2000RPM	0.81A	Both	> 5000	90mm	NO	2100g
F5B400-24GN-20S	24V	400W	1.91N.M	2700RPM	< 1.8A	2000RPM	20.83A	Both	> 5000	105mm	NO	2300g
F5B400-310GN-20S	310V	400W	1.91N.M	2600RPM	< 1.2A	2000RPM	1.61A	Both	> 5000	105mm	NO	2300g

DIMENSIONAL DRAWING

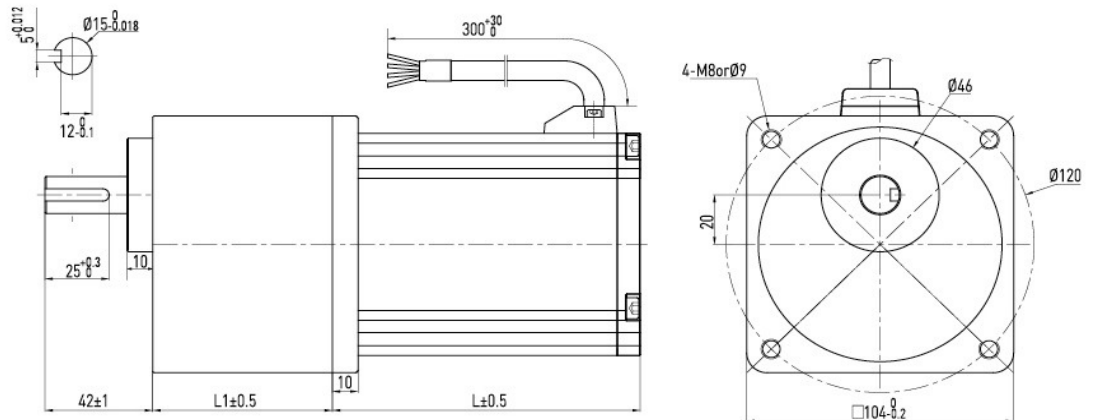


104 GEAR BOX

Allowance Torque Unit: N.m

Reduction 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
Output Speed	r/min	667	556	400	333	267	222	200	160	133	111	100	80	67	56	50	40	33	27	22	20	17	13
Allowable Torque	N.m	2.06	2.48	3.44	4.13	5.16	6.19	6.19	7.75	9.30	11.2	11.2	14.0	16.8	20.0	22.4	28.0	33.6	39.2	39.2	39.2	39.2	39.2

DIMENSIONAL DRAWING



MODEL DESCRIPTION OF MOTOR AND REDUCER

MOTOR

5 **I** **K** **40** **R** **G N** - **C** **T**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

①	Motor Frame Size	4: 80mm 5: 90mm 6: 104mm
②	Motor Type	I: Induction Motor R: Reversible Motor
③	Series	K: K Series
④	Output Power (W) (例 e.g.)	40: 40W
⑤	after the Output Power Means Speed Adjustable Motor.	
⑥	Motor Shaft Type	GN: GN Type Pinion Shaft GU: GU Type Pinion Shaft
⑦	Voltage-Poles	A: Single-Phase100V 110V 50/60Hz 4P C: Single-Phase220V 230V 50/60Hz 4P E: Single-Phase110V、120V 60Hz 4P H: Single-Phase220V、230V 60Hz 4P S: Three-Phase200/220/230V 50/60Hz 4P S3: Three-Phase380/415V 50/60Hz 4P
⑧	T: Terminal Box Type F: W/Fan FF: W/Forced Fan M: Power Off Activated Type Electromagnetic Brake Motor P: Thermal protector	

Notes: The capacitor may be different of a single phase motor with same power code and different voltage. Please check nameplate first.

REDUCER

5 **G N** **5 0** **RH**

① ② ③ ④

①	Gearhead Frame Size	4: 80mm 5: 90mm 6: 104mm
②	Gear Type	GN Type Gear GU Type Gear
③	Gear Ratio	Reduction Ratio: 50
④	Type of output shaft	RH: Hollow worm shaft RA: Worm output shaft RC: Spiral bevel hollow shaft RT: Spiral bevel output shaft



GEAR MOTOR-TORQUE TABLE

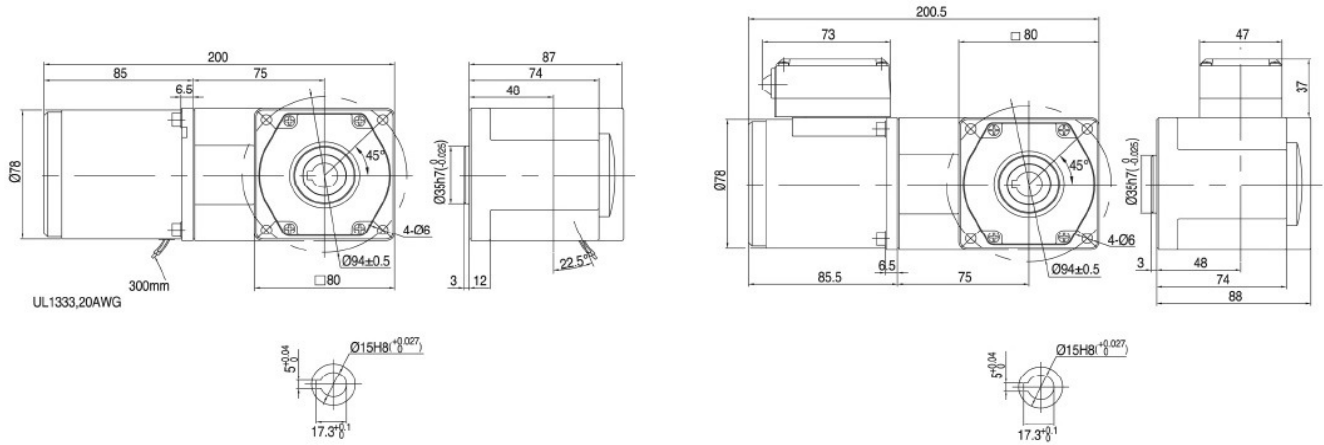
- Gearhead and mid-gearbox can be sold separately.
- Enter the code that represents the terminal box type (T) in the box (□) within the model name. ● Enter the gear ratio in the box (□) within the model name.
- The colored background indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- The speed is calculated by dividing the motor's synchronous speed (50Hz: 1500r/min、60Hz: 1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- To reduce the speed beyond the gear ratio in the table, attach a mid-gearbox (gear ratio: 10) between the gearhead and motor. In that case, the permissible torque is 8N·m.

Allowance Torque Unit: Upside (N.m) / Belowside (kgf.cm)

Motor/Gearhead		.Gear Ratio	Speed																																					
			50Hz		417		300		250		200		166		120		100		83		60		50		417		30		25		20		16		15		12		10	
41K25GN-A-□ 41K25GN-E-□ 41K25GN-C-□ 41K25GN-H-□ 41K25GN-S-□	4GN□RC 4GN□RT	Allowance Torque	50Hz		0.36	0.43	0.59	0.71	0.99	1.18	1.64	1.97	2.37	3.29	3.95	4.73	6.58	7.10	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00			
			60Hz		0.29	0.34	0.48	0.57	0.80	0.95	1.33	1.59	1.91	2.65	3.18	3.82	5.30	5.73	7.16	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	
			50Hz		3.62	4.35	6.04	7.25	10.1	12.1	16.8	20.1	24.2	33.5	40.3	48.3	67.1	72.5	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
			60Hz		2.92	3.51	4.87	5.84	8.12	9.74	13.5	16.2	19.5	27.1	32.5	39.0	54.1	58.4	73.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
			60Hz		2.92	3.51	4.87	5.84	8.12	9.74	13.5	16.2	19.5	27.1	32.5	39.0	54.1	58.4	73.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0

INDUCTION, REVERSIBLE TYPE DRAWING

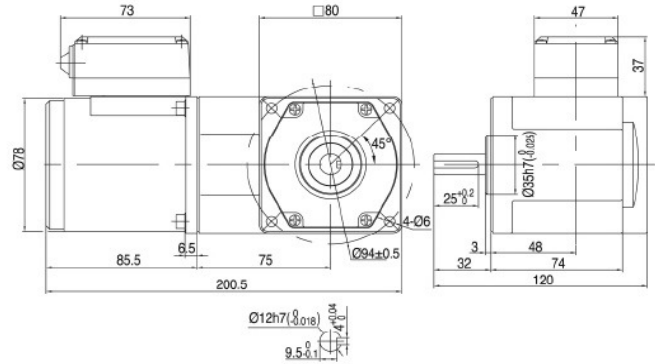
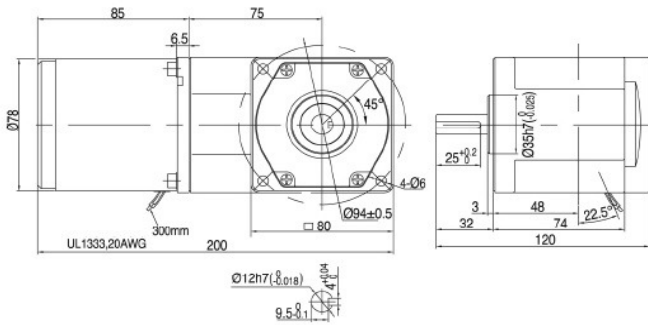
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 41K25GN-E/4GN□RC 41K25GN-H/4GN□RC 41K25GN-ET/4GN□RC 41K25GN-HT/4GN□RC 41K25GN-ST/4GN□RC



INDUCTION, REVERSIBLE TYPE DRAWING

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 4IK25GN-E/4GN□RT 4IK25GN-H/4GN□RT

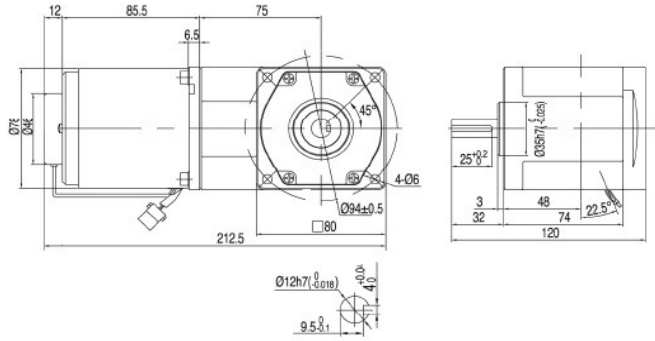
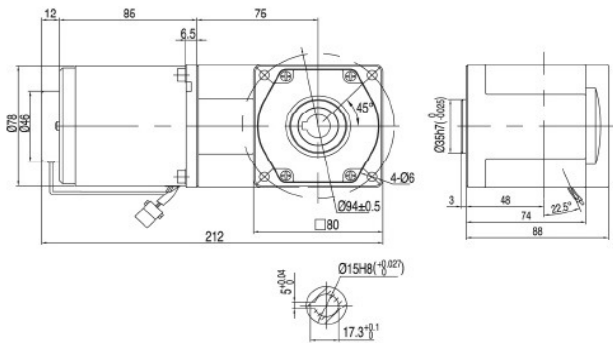
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SPEED CONTROL TYPE DRAWING

4IK25RGN-A/4GN□RC 4IK25RGN-C/4GN□RC
 4IK25RGN-E/4GN□RC 4IK25RGN-H/4GN□RC

4IK25RGN-A/4GN□RT 4IK25RGN-C/4GN□RT
 4IK25RGN-E/4GN□RT 4IK25RGN-H/4GN□RT

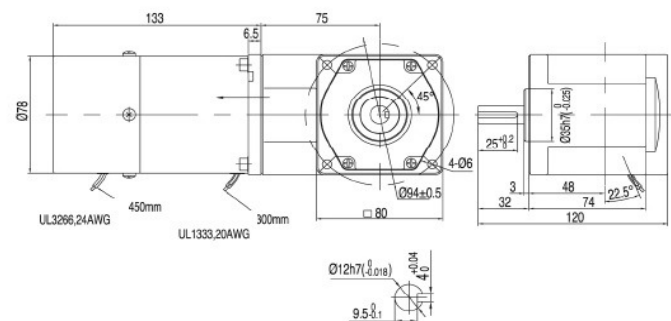
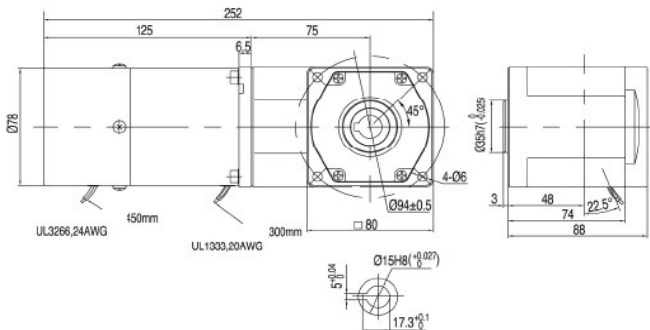


Note: The connector is for FTG standard speed controller.

BRAKE TYPE DRAWING

4RK25GN-AM/4GN□RC 4RK25GN-CM/4GN□RC
 4RK25GN-EM/4GN□RC 4RK25GN-HM/4GN□RC

4RK25GN-AM/4GN□RT 4RK25GN-CM/4GN□RT
 4RK25GN-EM/4GN□RT 4RK25GN-HM/4GN□RT





GEAR MOTOR-TORQUE TABLE

- Gearhead and mid-gearbox can be sold separately.
- Enter the code that represents the terminal box type (T) in the box (□) within the model name. • Enter the gear ratio in the box (□) within the model name.
- The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- The speed is calculated by dividing the motor's synchronous speed (50Hz: 1500r/min、60Hz: 1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- To reduce the speed beyond the gear ratio in the table, attach a mid-gearbox (gear ratio: 10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

Allowance Torque Unit: Upside (N.m) / Belowside (kgf.cm)

Type	Gear Ratio																						
		3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180		
Motor/Gearhead	Speed																						
	r/min	50Hz	500	417	300	250	200	166	120	100	83	60	50	417	30	25	20	16	15	12	10	8	
5IK40GU-A□ 5IK40GU-E□ 5IK40GU-C□ 5IK40GU-H□ 5IK40GU-S□	Allowance Torque	50Hz	5GU□RC	0.57	0.68	0.95	1.14	1.58	1.89	2.63	3.16	3.79	5.26	6.31	6.8	9.5	11.4	14.2	17.0	18.9	20.0	20.0	20.0
			5GU□RT	5.80	6.96	9.66	11.6	16.1	19.3	26.8	32.2	38.6	53.7	64.4	70	97	116	145	174	193	200	200	200
		60Hz	5GU□RC	0.46	0.55	0.76	0.92	1.27	1.53	2.12	2.55	3.05	4.24	5.09	5.50	7.64	9.16	11.5	13.7	15.3	18.3	20.0	20.0
			5GU□RT	4.67	5.61	7.79	9.35	13.0	15.6	21.6	26.0	31.2	43.3	51.9	56.1	77.9	93.5	117	140	156	187	200	200

INDUCTION ,REVERSIBLE TYPE DRAWING

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5IK40GU-H/5GU□RC

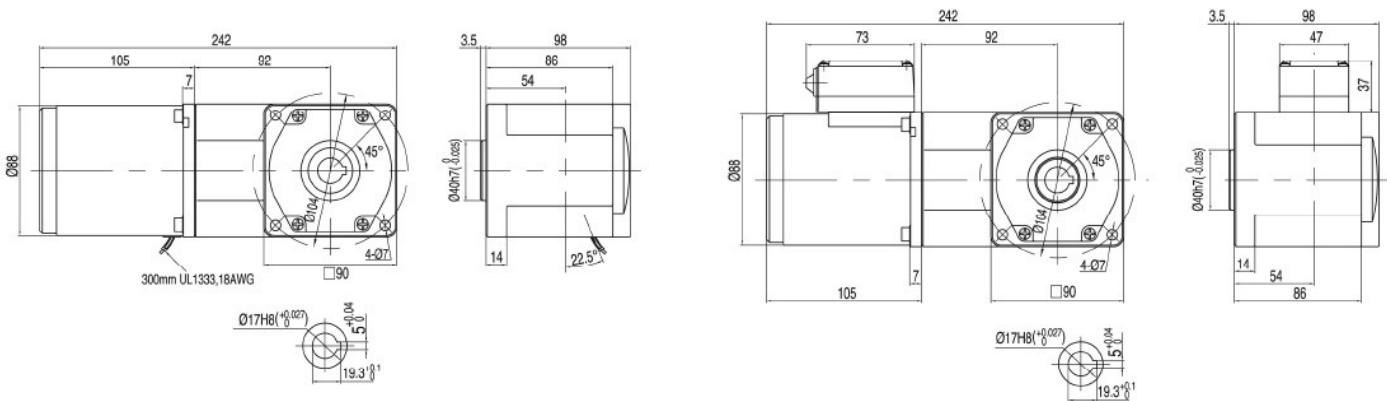
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5IK40GU-S/5GU□RC

5IK40GU-C/5GU□RC

5IK40GU-AT/5GU□RC
5IK40GU-HT/5GU□RC

5IK40GU-ET/5GU□RC
5IK40GU-ST/5GU□RC

5IK40GU-CT/5GU□RC



INDUCTION ,REVERSIBLE TYPE DRAWING

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5IK40GU-H/5GU□RT

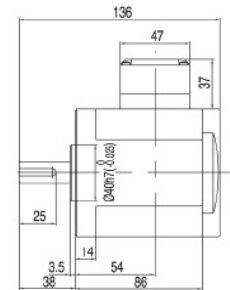
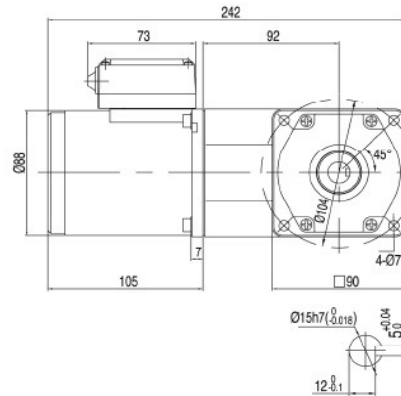
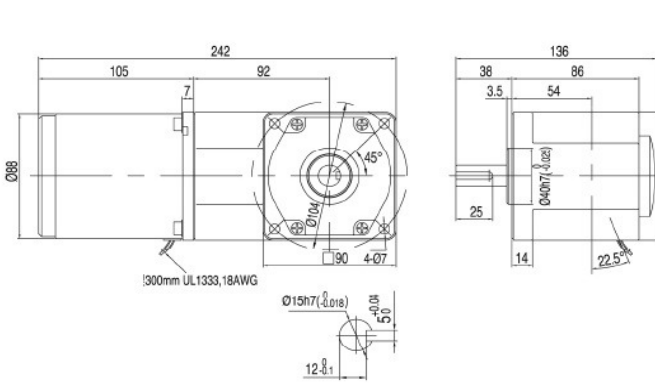
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5IK40GU-CT/5GU□RT



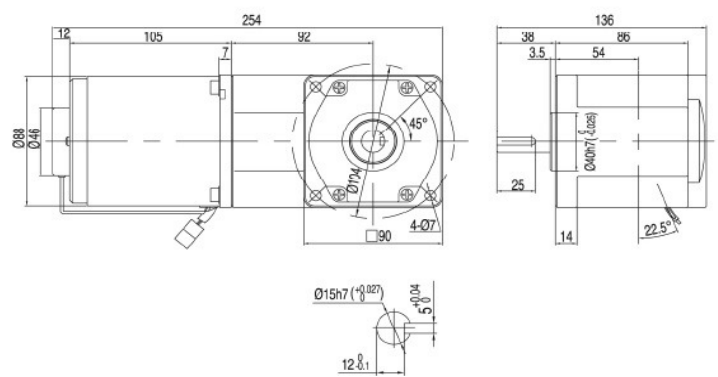
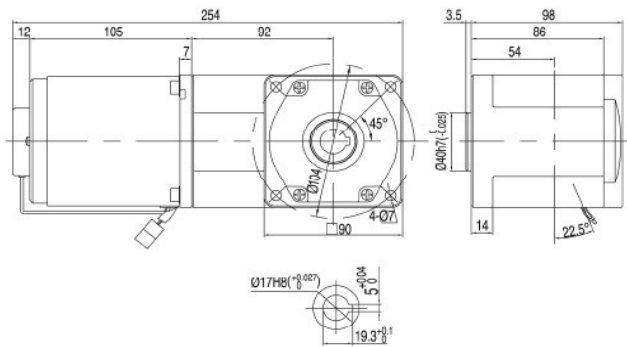
SPEED CONTROL TYPE DRAWING

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5IK40RGU-E/5GU□RC
5IK40RGU-H/5GU□RC

5IK40RGU-A/5GU□RT
5IK40RGU-C/5GU□RT

5IK40RGU-E/5GU□RT
5IK40RGU-H/5GU□RT



Note: The connector is for FTG standard speed controller.

BRAKE TYPE DRAWING

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5RK40GU-HM/5GU□RC

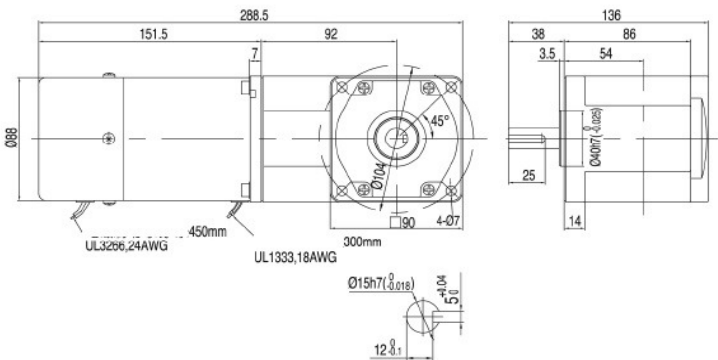
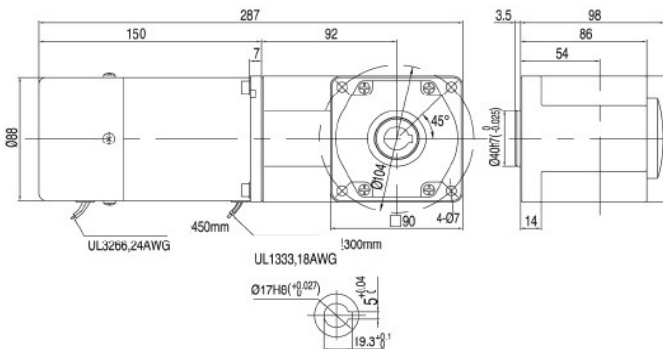
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5RK40GU-SM/5GU□RC

5RK40GU-CM/5GU□RC

5RK40GU-AM/5GU□RT
5RK40GU-HM/5GU□RT

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5RK40GU-SM/5GU□RT

5RK40GU-CM/5GU□RT





GEAR MOTOR-TORQUE TABLE

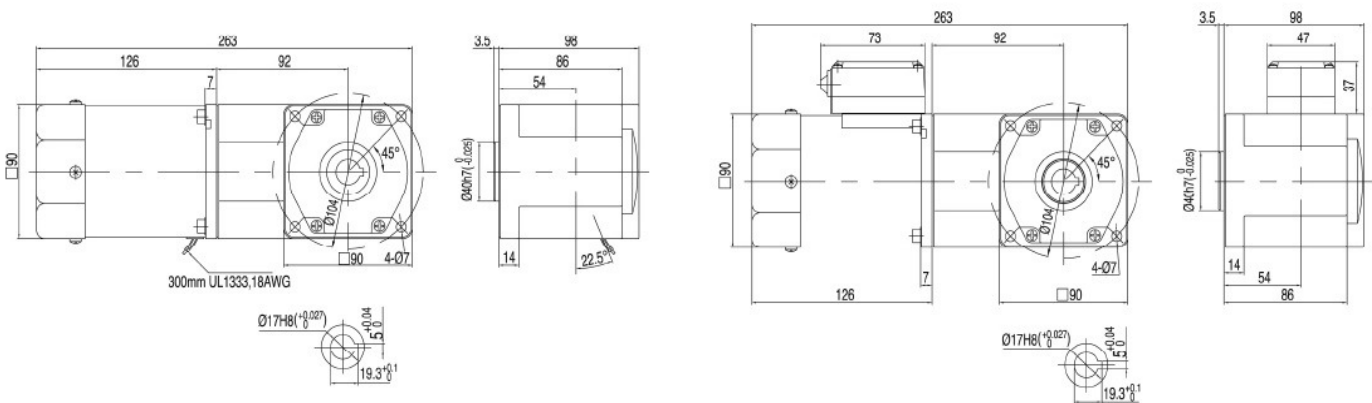
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- Enter the gear ratio in the box (□) within the model name.
- The colored background indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- The speed is calculated by dividing the motor's synchronous speed (50Hz: 1500r/min、60Hz: 1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- To reduce the speed beyond the gear ratio in the table, attach a mid-gearbox (gear ratio: 10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

Allowance Torque Unit: Upside (N.m) / Belowside (kgf.cm)

Type	Gear Ratio	Gear Ratio																					
		3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180		
Motor/Gearhead	Speed r/min	50Hz	500	417	300	250	200	166	120	100	83	60	50	417	30	25	20	16	15	12	10	8	
		60Hz	600	500	360	300	240	200	144	120	100	72	60	500	36	30	24	20	18	15	12	10	
5IK60GU-A□F 5IK60GU-E□F 5IK60GU-C□F 5IK60GU-H□F 5IK60GU-S□F	5GU□RC 5GU□RT	Allowance Torque	50Hz	0.85	1.02	1.42	1.70	2.37	2.84	3.95	4.73	5.68	7.89	9.47	10.2	14.2	17.0	20.0	20.0	20.0	20.0	20.0	
				8.70	10.4	14.5	17.4	24.2	29.0	40.3	48.3	58.0	80.5	96.6	104	145	174	200	200	200	200	200	200
			60Hz	0.69	0.82	1.15	1.37	1.91	2.29	3.18	3.82	4.58	6.36	7.64	8.25	11.5	13.7	17.2	20.0	20.0	20.0	20.0	20.0
				6.73	8.08	11.2	13.5	19.48	23.37	32.46	38.96	46.75	64.93	77.92	84.1	117	140	175	200	200	200	200	200

INDUCTION,REVERSIBLE TYPE DRAWING

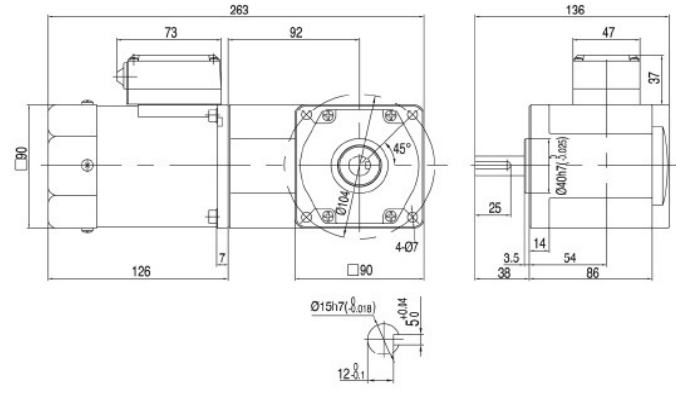
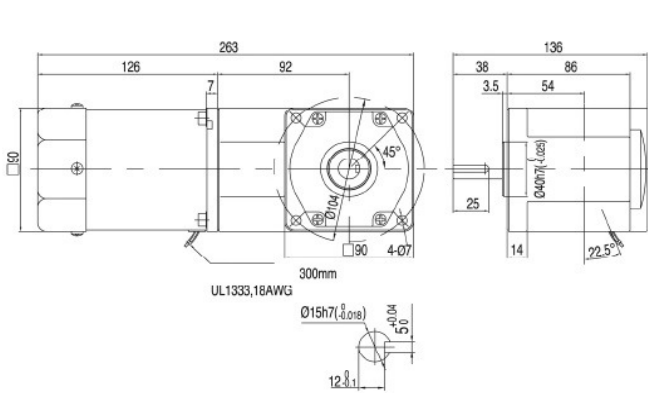
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 5IK60GU-HF/5GU□RC 5IK60GU-SF/5GU□RC 5IK60GU-HTF/5GU□RC 5IK60GU-STF/5GU□RC



INDUCTION, REVERSIBLE TYPE DRAWING

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 5IK60GU-HF/5GU□RT 5IK60GU-SF/5GU□RT

5IK60GU-ATF/5GU□RT 5IK60GU-ETF/5GU□RT 5IK60GU-CTF/5GU□RT
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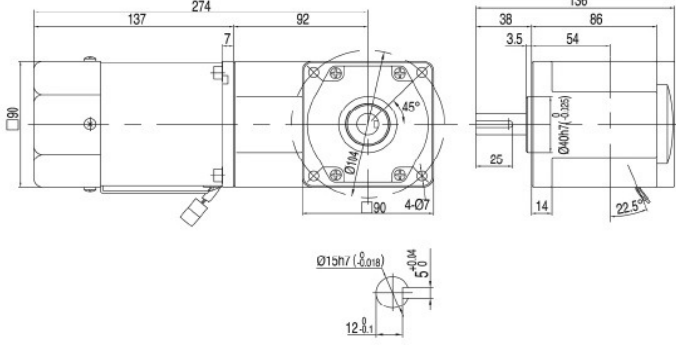
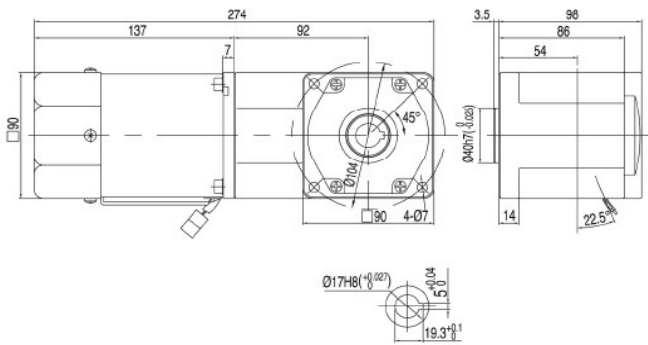
SPEED CONTROL TYPE DRAWING

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5IK60RGU-EF/5GU□RT
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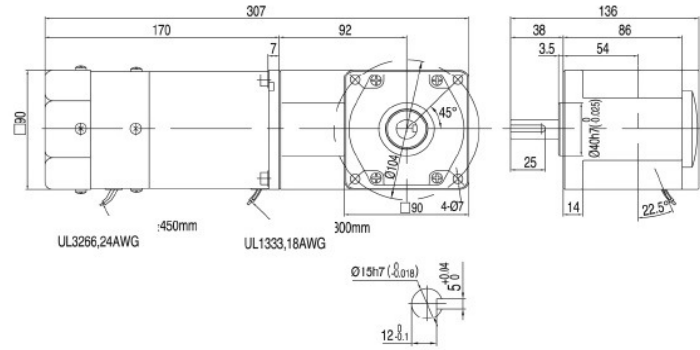
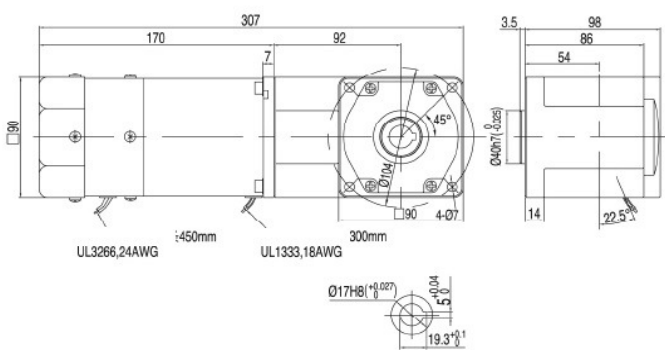


Note: The connector is for FTG standard speed controller.

BRAKE TYPE DRAWING

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 5RK60GU-HMF/5GU□RC 5IK60GU-SMF/5GU□RC

5RK60GU-AMF/5GU□RT 5RK60GU-EMF/5GU□RT 5RK60GU-CMF/5GU□RT
 5RK60GU-HMF/5GU□RT 5IK60GU-SMF/5GU□RT





GEAR MOTOR-TORQUE TABLE

- Gearhead and mid-gearbox can be sold separately.
- Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- Enter the gear ratio in the box (□) within the model name.
- The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- The speed is calculated by dividing the motor's synchronous speed (50Hz: 1500r/min、60Hz: 1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- To reduce the speed beyond the gear ratio in the table, attach a mid-gearbox (gear ratio: 10) between the gearhead and motor. In that case, the permissible torque is 20N·m.

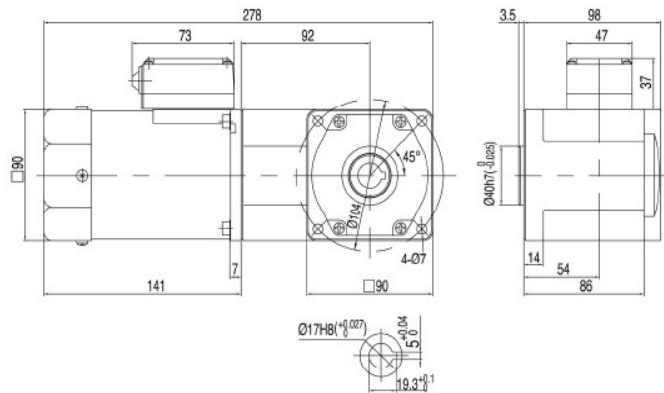
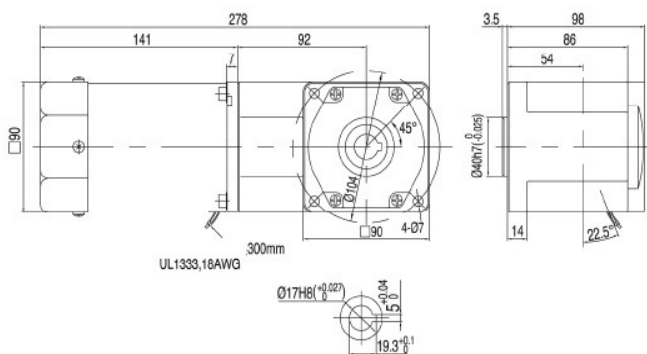
Allowance Torque Unit: Upside (N.m) / Belowside (kgf.cm)

Motor/Gearhead	Speed r/min	Gear Ratio																			
		3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
5IK120GU-A□F 5IK120GU-E□F 5IK120GU-C□F 5IK120GU-H□F 5IK120GU-S□F	50Hz	1.70	2.05	2.84	3.41	4.73	5.68	7.89	9.47	11.4	15.8	18.9	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
	60Hz	1.37	1.65	2.29	2.75	3.82	4.58	6.36	7.64	9.16	12.7	15.3	16.5	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
	容许力矩 Allowance Torque	14.0	16.8	23.4	28.0	39.0	46.7	64.9	77.9	93.5	130	156	168	200	200	200	200	200	200	200	200

INDUCTION,REVERSIBLE TYPE DRAWING

5IK120GU-AF/5GU□RC 5IK120GU-EF/5GU□RC 5IK120GU-CF/5GU□RC
5IK120GU-HF/5GU□RC 5IK120GU-SF/5GU□RC

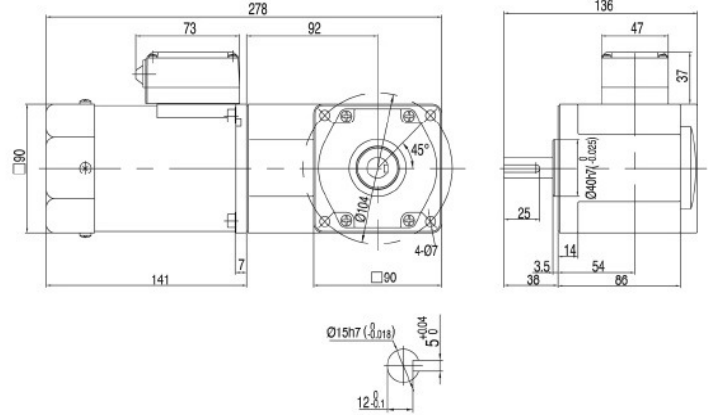
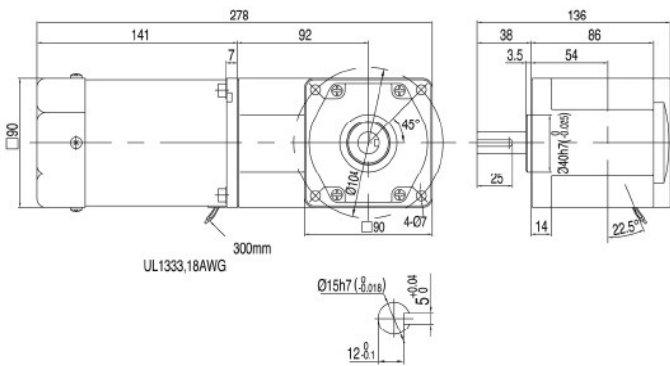
5IK120GU-ATF/5GU□RC 5IK120GU-ETF/5GU□RC 5IK120GU-CTF/5GU□RC
5IK120GU-HTF/5GU□RC 5IK120GU-STF/5GU□RC



INDUCTION, REVERSIBLE TYPE DRAWING

5IK120GU-AF/5GU□RT 5IK120GU-EF/5GU□RT 5IK120GU-CF/5GU□RT
 5IK120GU-HF/5GU□RT 5IK120GU-SF/5GU□RT

5IK120GU-ATF/5GU□RT 5IK120GU-ETF/5GU□RT 5IK120GU-CTF/5GU□RT
 5IK120GU-HTF/5GU□RT 5IK120GU-STF/5GU□RT



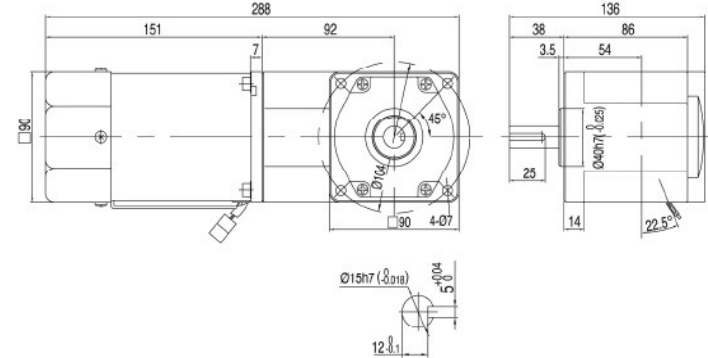
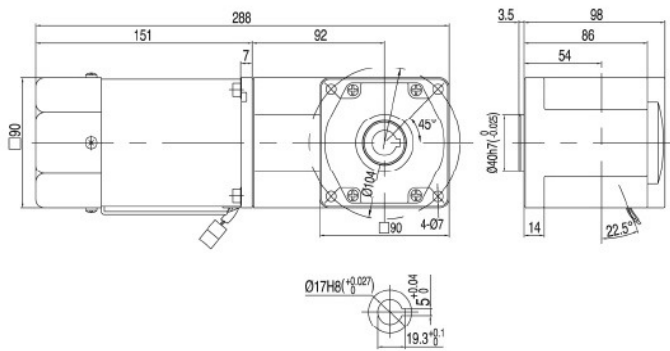
SPEED CONTROL TYPE DRAWING

5IK120RGU-AF/5GU□RC
 5IK120RGU-CF/5GU□RC

5IK120RGU-EF/5GU□RC
 5IK120RGU-HF/5GU□RC

5IK120RGU-AF/5GU□RT
 5IK120RGU-CF/5GU□RT

5IK120RGU-EF/5GU□RT
 5IK120RGU-HF/5GU□RT

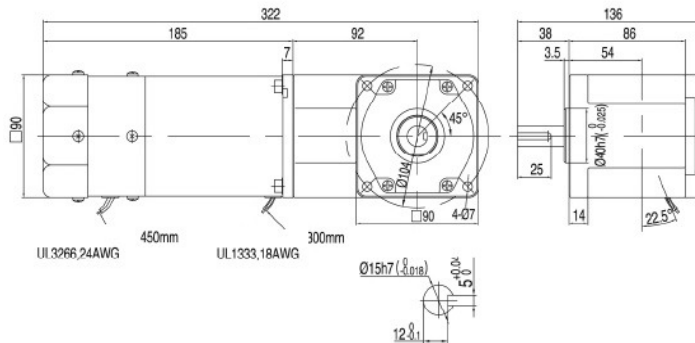
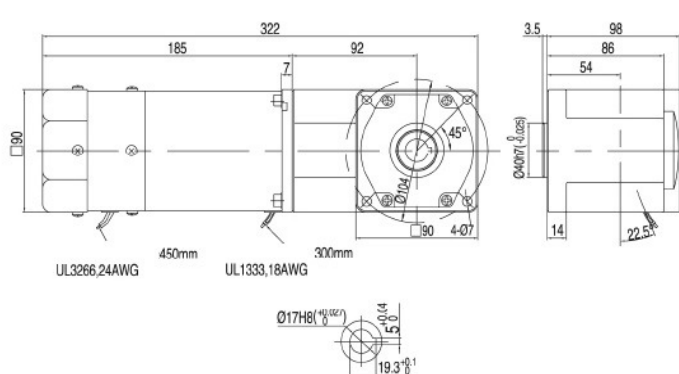


Note: The connector is for FTG standard speed controller.

BRAKE TYPE DRAWING

5RK120GU-AMF/5GU□RC 5RK120GU-EMF/5GU□RC 5RK120GU-CMF/5GU□RC
 5RK120GU-HMF/5GU□RC 5IK120GU-SMF/5GU□RC

5RK120GU-AMF/5GU□RT 5RK120GU-EMF/5GU□RT 5RK120GU-CMF/5GU□RT
 5RK120GU-HMF/5GU□RT 5IK120GU-SMF/5GU□RT





GEAR MOTOR-TORQUE TABLE

- Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- Enter the gear ratio in the box (□) within the model name.
- The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- The speed is calculated by dividing the motor's synchronous speed (50Hz: 1500r/min、60Hz: 1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- the permissible torque is 60N·m.

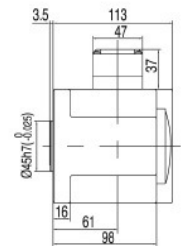
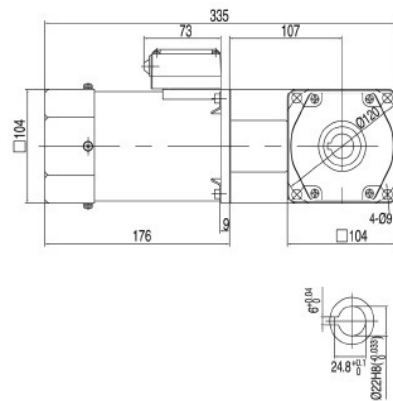
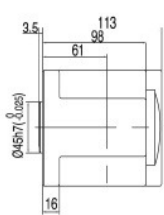
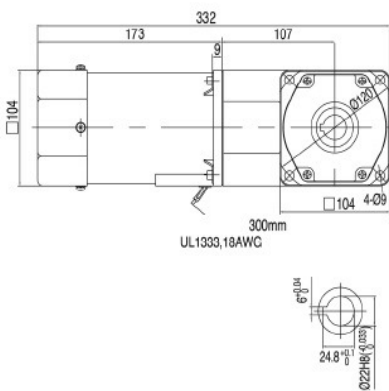
Allowance Torque Unit: Upside (N.m) / Belowside (kgf.cm)

Type	Gear Ratio	Gear Ratio																						
		3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180			
Motor/Gearhead	Speed																							
	r/min	50Hz	500	417	300	250	200	166	120	100	83	60	50	417	30	25	20	16	15	12	10	8		
6IK140GU-A□F 6IK140GU-E□F 6IK140GU-C□F 6IK140GU-H□F 6IK140GU-S□F	Allowance Torque	50Hz	6GU□RC	1.99	2.39	3.31	3.98	4.97	6.63	9.21	11.0	13.3	18.4	22.1	26.5	33.1	39.8	49.7	59.6	60.0	60.0	60.0	60.0	
			6GU□RT	20.3	24.3	33.8	40.6	50.7	67.6	93.9	113	135	188	225	271	338	406	507	600	600	600	600	600	
		60Hz	6GU□RC	1.60	1.92	2.67	3.21	4.01	5.34	7.42	8.91	10.7	14.8	17.8	21.4	26.7	32.1	40.1	48.1	53.4	60.0	60.0	60.0	60.0
			6GU□RT	16.4	19.6	27.3	32.7	40.9	54.5	75.8	90.9	109	152	182	218	273	327	409	491	545	600	600	600	600

INDUCTION ,REVERSIBLE TYPE DRAWING

6IK140GU-AF/6GU□RC 6IK140GU-EF/6GU□RC 6IK140GU-CF/6GU□RC
6IK140GU-HF/6GU□RC 6IK140GU-SF/6GU□RC

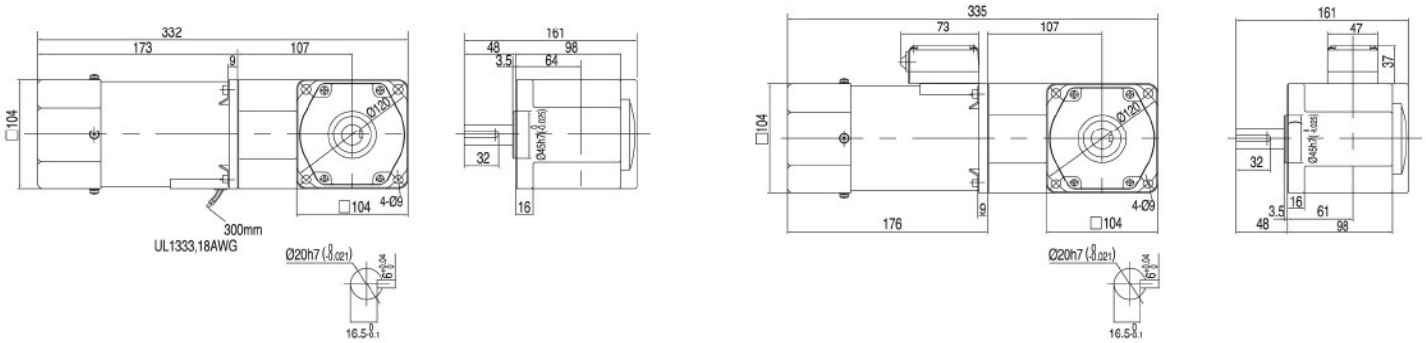
6IK140GU-ATF/6GU□RC 6IK140GU-ETF/6GU□RC 6IK140GU-CTF/6GU□RC
6IK140GU-HTF/6GU□RC 6IK140GU-STF/6GU□RC



INDUCTION ,REVERSIBLE TYPE DRAWING

6IK140GU-AF/6GU□RT 6IK140GU-EF/6GU□RT 6IK140GU-CF/6GU□RT
 6IK140GU-HF/6GU□RT 6IK140GU-SF/6GU□RT

6IK140GU-ATF/6GU□RT 6IK140GU-ETF/6GU□RT 6IK140GU-CTF/6GU□RT
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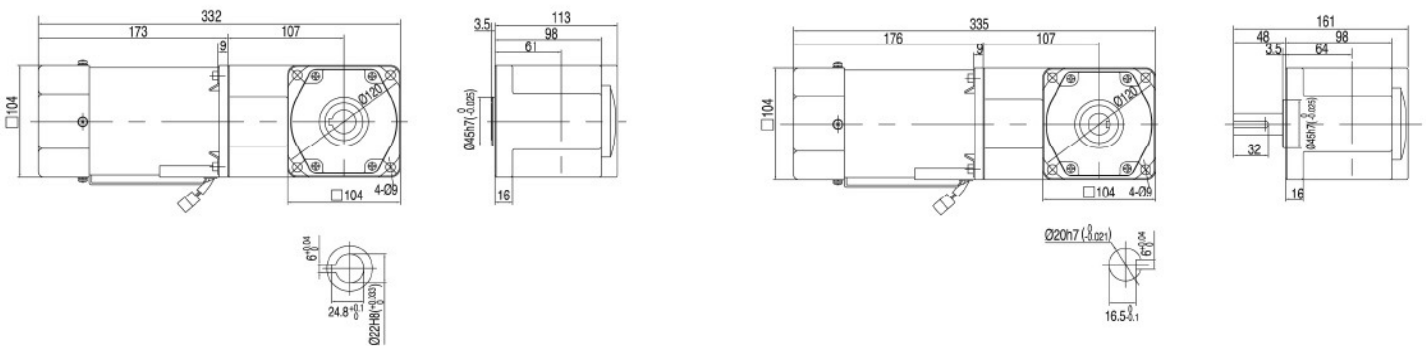
SPEED CONTROL TYPE DRAWING

6IK140RGU-AF/6GU□RC
 6IK140RGU-CF/6GU□RC

6IK140RGU-EF/6GU□RC
 6IK140RGU-HF/6GU□RC

6IK140RGU-AF/6GU□RT
 6IK140RGU-CF/6GU□RT

6IK140RGU-EF/6GU□RT
 6IK140RGU-HF/6GU□RT

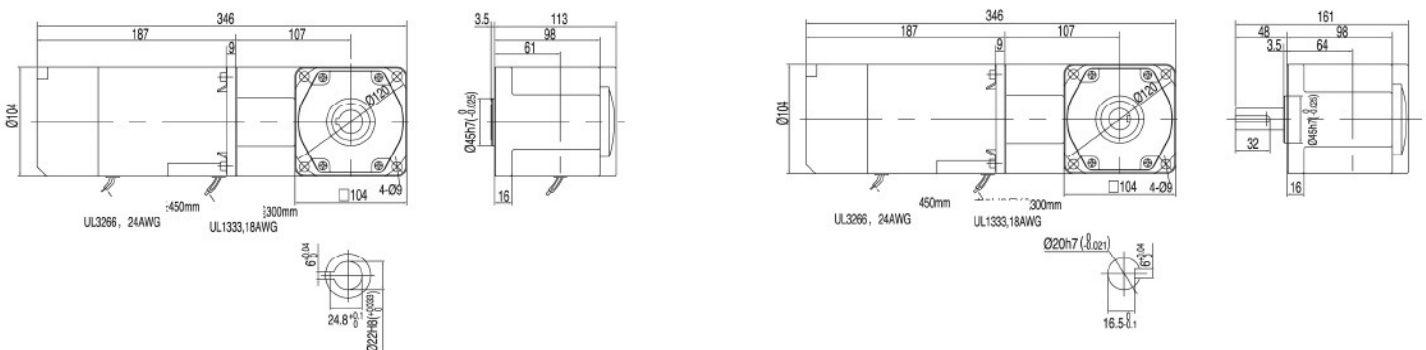


Note: The connector is for FTG standard speed controller.

BRAKE TYPE DRAWING

6RK140GU-AM/6GU□RC 6RK140GU-EM/6GU□RC 6RK140GU-CM/6GU□RC
 6RK140GU-HM/6GU□RC 6RK140GU-SM/6GU□RC

6RK140GU-AM/6GU□RT 6RK140GU-EM/6GU□RT 6RK140GU-CM/6GU□RT
 6RK140GU-HM/6GU□RT 6RK140GU-SM/6GU□RT





GEAR MOTOR-TORQUE TABLE

- Enter the code that represents the terminal box type (T) in the box (□) within the model name.
- Enter the gear ratio in the box (□) within the model name.
- The colored background □ indicates the same rotating direction of the motor while the rotating direction of others are opposite.
- The speed is calculated by dividing the motor's synchronous speed (50Hz: 1500r/min、60Hz: 1800r/min) by the gear ratio. The actual speed is 2%~20% less than the displayed value, depending on the size of the load.
- the permissible torque is 60N-m.

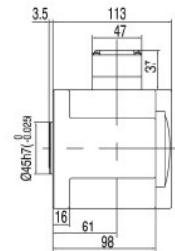
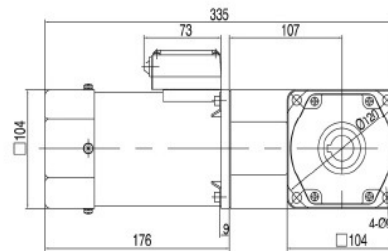
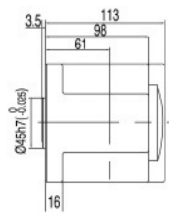
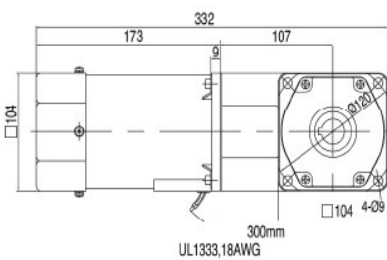
Allowance Torque Unit: Upside (N.m) / Belowside (kgf.cm)

Type	Gear Ratio	Gear Ratio																					
		3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180		
Motor/Gearhead	Speed r/min	50Hz	500	417	300	250	200	166	120	100	83	60	50	417	30	25	20	16	15	12	10	8	
		60Hz	600	500	360	300	240	200	144	120	100	72	60	500	36	30	24	20	18	15	12	10	
6IK180GU-A□F 6IK180GU-E□F 6IK180GU-C□F 6IK180GU-H□F 6IK180GU-S□F	6GU□RC 6GU□RT	Allowance Torque	50Hz	2.56	3.07	4.26	5.11	6.39	8.52	11.8	14.2	17.0	23.7	28.4	34.1	42.6	51.1	60.0	60.0	60.0	60.0	60.0	
				26.1	31.3	43.5	52.2	65.2	87.0	121	145	174	242	290	348	435	522	600	600	600	600	600	600
			60Hz	2.06	2.47	3.44	4.12	5.15	6.87	9.54	11.5	13.7	19.1	22.9	27.5	34.4	41.2	51.5	60.0	60.0	60.0	60.0	60.0
				21.0	25.2	35.1	42.1	52.6	70.1	97.4	117	140	195	234	280	351	421	526	600	600	600	600	600

INDUCTION,REVERSIBLE TYPE DRAWING

6IK180GU-AF/6GU□RC 6IK180GU-EF/6GU□RC 6IK180GU-CF/6GU□RC
6IK180GU-HF/6GU□RC 6IK180GU-SF/6GU□RC

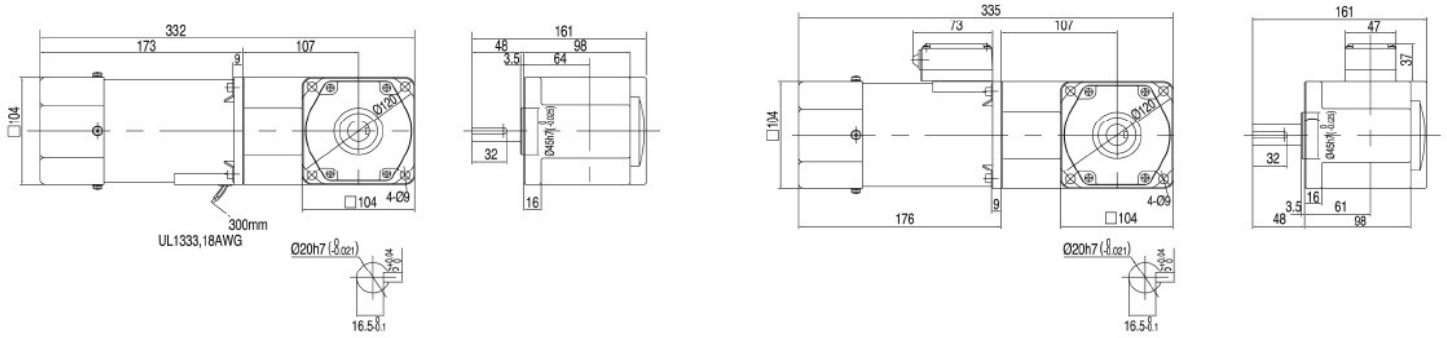
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6IK140GU-HTF/6GU□RC 6IK140GU-STF/6GU□RC



INDUCTION, REVERSIBLE TYPE DRAWING

6IK180GU-AF/6GU□RT 6IK180GU-EF/6GU□RT 6IK180GU-CF/6GU□RT
 6IK180GU-HF/6GU□RT 6IK180GU-SF/6GU□RT

6IK180GU-ATF/6GU□RT 6IK180GU-ETF/6GU□RT 6IK180GU-CTF/6GU□RT
 6IK180GU-HTF/6GU□RT 6IK180GU-STF/6GU□RT



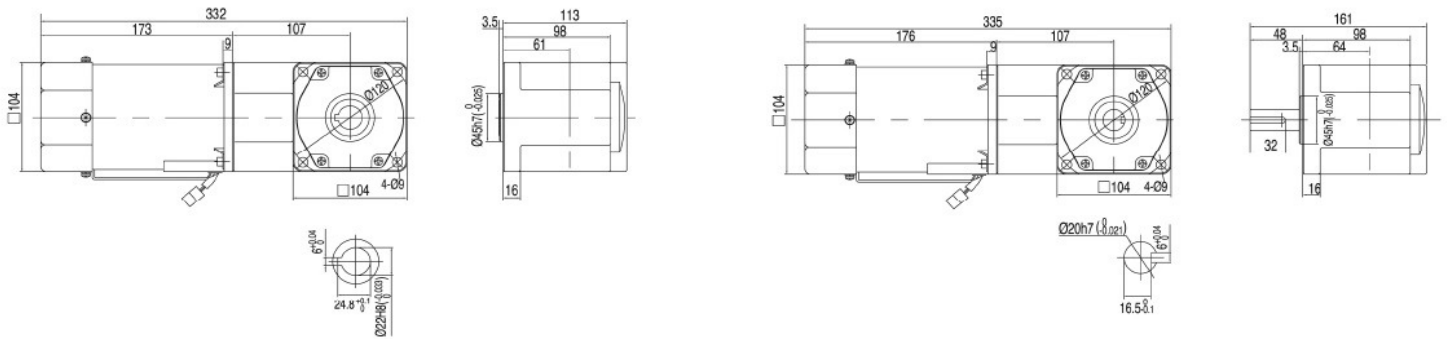
SPEED CONTROL TYPE DRAWING

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 6IK180RGU-CF/6GU□RC

6IK180RGU-EF/6GU□RC
 6IK180RGU-HF/6GU□RC

6IK180RGU-AF/6GU□RT
 6IK180RGU-CF/6GU□RT

6IK180RGU-EF/6GU□RT
 6IK180RGU-HF/6GU□RT



Note: The connector is for FTG standard speed controller.

BRAKE TYPE DRAWING

6RK180GU-AM/6GU□RC
 6RK180GU-HM/6GU□RC

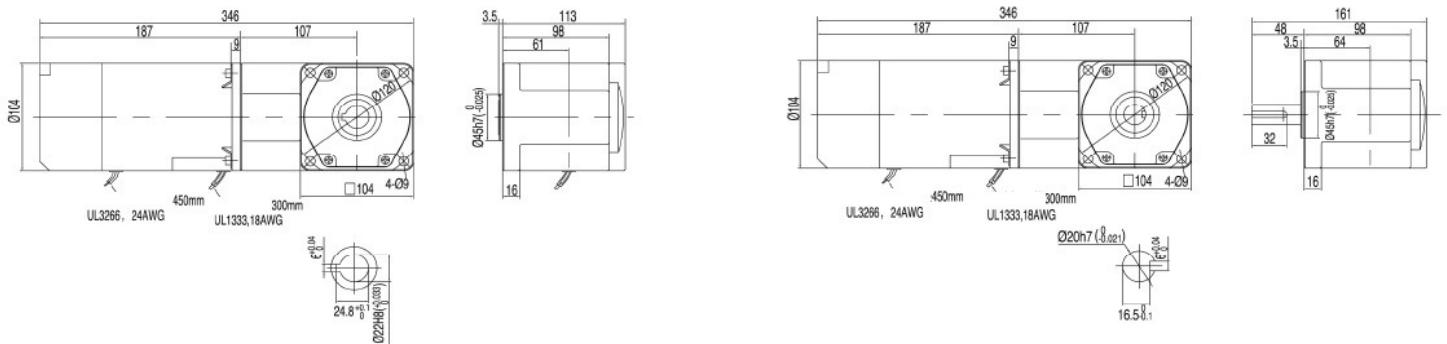
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6RK180GU-CM/6GU□RC

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 6RK180GU-HM/6GU□RT

6RK180GU-EM/6GU□RT
 6RK180GU-SM/6GU□RT

6RK180GU-CM/6GU□RT





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