AC/DC Geared Motor and Gearbox

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DKM
motor & gearbox

Ver. English

DKM Motor Co., Ltd,
OPIS Engineering k.s.

Reversible Motor

Index

B AC Motors

Outline of Reversible Motor

Suitable for Bi-directional Continuous Operation

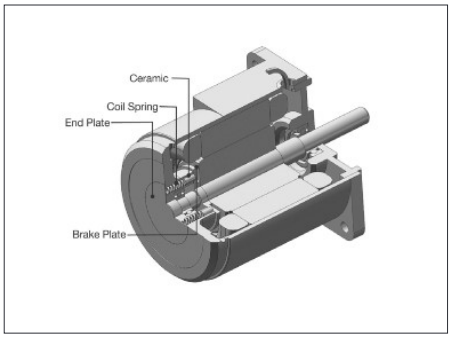
- Reversible motors are designed for application where frequent switch of direction is required. It is capacitor run type and single phase induction motor. So its basic features including speed, torque and voltage are same with that of induction motors. For the function of frequent bi-directional operation within short time, the temporary brake is employed.

The Rating Time: 30 Minutes

- Reversible motors are designed for bi-directional operation within short time so it can't avoid very high loss of input. So generally its temperature rising could be more severe than induction motor. As a result, the rated operating time could be limited to 30 minutes. But please be informed that depending on operating condition, they can be operated for more 30 minutes if it is operated intermittently.

Brake Mechanism of the Reversible Motor

- A reversible motor employed a simple and built-in brake mechanism for the following purposes:
  (1) To improve the frequent and instant reversing function by applying a friction load
  (2) To reduce overrun
- The coil spring applies constant pressure so that the ceramic (brake block) slides toward the brake plate. This mechanism provides some degree of holding brake force, but there is limit in the force due to the mechanism's structure. The brake force is approximately 10% of the motor's output.

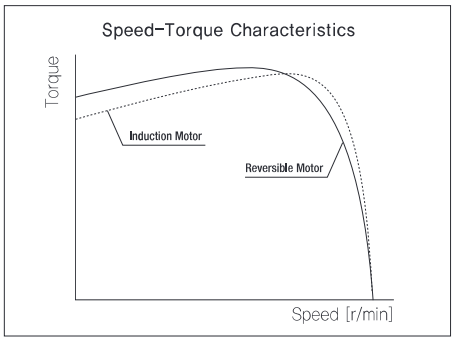


Speed-Torque Characteristics

- The reversible motor is a single phase induction motor of capacitor run type which has the same characteristics as an induction motor. The reversible motor has a higher starting torque than an induction motor in order to improve the instant reversing characteristics.

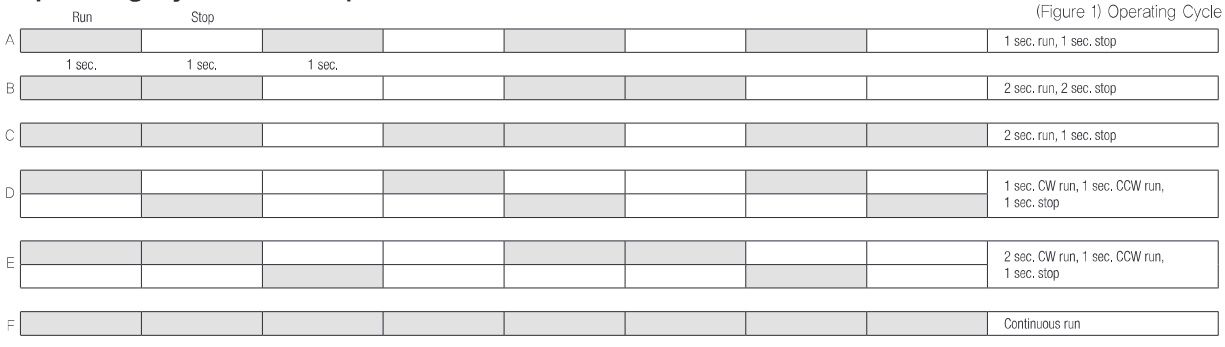
Operation Time and Temperature Rise

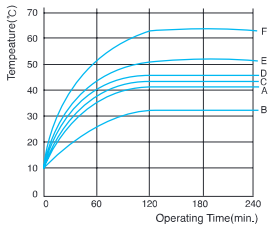
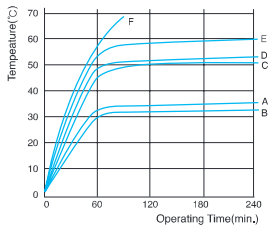
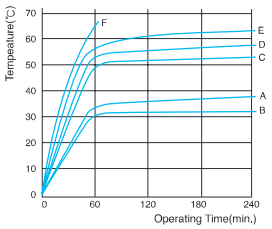
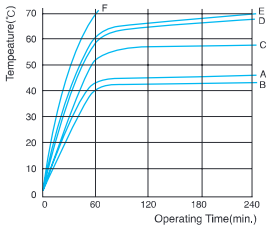
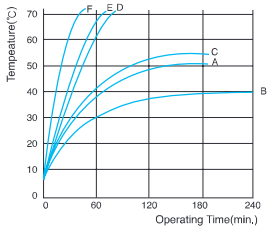
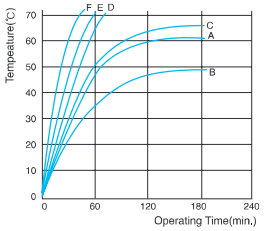
- The rating time of reversible motor is 30 minutes. But when the motor is operated intermittently for a short period of time, the operation time may vary depending on the operating conditions. The intermittent operation for a short period of time will cause a considerable flow of electric current in starting or reversing causing greater heat generation. But the motor's temperature rise can be controlled by keeping the motor at rest without using for a longer time by enhancing its natural cooling capability. Generally if the temperature of motor case remains below 90℃ constantly, the continuous operation is possible under unchanged condition considering insulation class of coil winding. But the life time of bearing grease will be much longer, the lower temperature.



Operating Cycle and Temperature Rise

(Figure 1) Operating Cycle

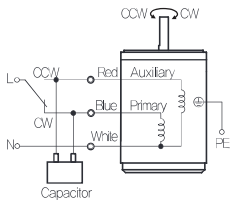
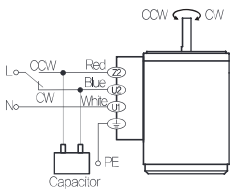


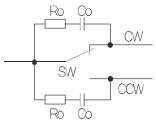
〈Figure 2〉 7RDD□-6	〈Figure 3〉 7RDD□-10	〈Figure 4〉 8RDD□-15
		
〈Figure 5〉 8RDD□-25	〈Figure 6〉 9RDD□-40	〈Figure 7〉 9RDD□-60F
		

General Specifications

Item	Specification
Insulation Resistance	100MΩ or more when DC500V MEGA is applied between the windings and the frame after rated motor operation under normal ambient temperature and humidity.
Dielectric Strength	Sufficient to withstand 1.5KV at 50Hz and 60Hz applied between the windings and the frame for 1 minute after rated motor operation under normal ambient temperature and humidity.
Temperature Rise	Temperature rise of windings are 80℃ or less measured by the resistance change method after rated motor operation with connecting a gearhead or equivalent heat radiation plate.
Insulation Class	Class B [130℃]
Overheat Protection	Operating temperature (Built-in thermal protector type motor): Open 120℃±5℃, Close 90℃±5℃
Ambient Temperature	-10℃~+40℃ (Three phase 220VAC: -10℃~+50℃)
Ambient Humidity	85% maximum

Connection Diagrams

Lead Wire Type	Terminal Box Type
	



Code	Contact Capacity
SW	AC125V 5A min. or AC250V 5A min. (Inductive load)
Ro, Co	Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)

* Connect a CR circuit for surge suppression to protect the contact.

B AC Motors

Reversible Motor 6W(□60mm)

6W Reversible Motor 6W(□60mm)

Motor Specification

Model 6RDG□-6G(-T): Gear Type Shaft 6RDD□-6(-T): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Starting Torque		Rated Load				Capacitor
									Speed	Current	Torque		
Lead Wire Type	Terminal Box Type	W	V	Hz			kgfcm	N.m	r/min	A	kgfcm	N.m	μF / VAC
6RDGA-6G	6RDGA-6G-T	6	1ø110	60	4	30min.	0.60	0.060	1550	0.25	0.38	0.038	3.0 / 250
6RDGD-6G	6RDGD-6G-T	6	1ø220	60	4	30min.	0.62	0.062	1550	0.15	0.42	0.042	1.0 / 450
6RDGE-6G	6RDGE-6G-T	6	1ø220	50	4	30min.	0.50	0.050	1200	0.10	0.47	0.047	0.7 / 450
			1ø240				0.55	0.055		0.11	0.50	0.050	

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) This model is impedance protected type.
3) Gear Type Shaft is for attaching gearhead and D-Cut Type Shaft is for using motor only.

Max. Permissible Torque at Output Shaft of Gearhead

60Hz

Motor Model	Gearhead Model	Gear 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
		r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10
6RDG□-6G	6GBD□MH	kgfcm	1.0	1.3	1.7	2.1	2.6	3.1	3.5	4.4	5.2	6.3	6.3	7.9	9.5	11.3	12.6	14.3	17.1	21.4	25.7	28.6	30.0	30.0	30.0
		N.m	0.10	0.12	0.17	0.20	0.26	0.31	0.34	0.43	0.51	0.61	0.62	0.77	0.93	1.11	1.23	1.40	1.68	2.10	2.52	2.80	2.94	2.94	2.94

Motor Model	Gearhead Model	Gear Ratio	200	250
		r/min	9	7.2
6RDG□-6G	6GBD□MH	kgfcm	30.0	30.0
		N.m	2.94	2.94

50Hz

Motor Model	Gearhead Model	Gear 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
		r/min	500	417	300	250	200	166	150	120	100	83	75	60	50	41	37	30	25	20	16	15	12	10	8
6RDG□-6G	6GBD□MH	kgfcm	1.2	1.5	2.1	2.5	3.1	3.7	4.2	5.2	6.2	7.5	7.5	9.4	11.3	13.5	15.0	17.0	20.4	25.5	30.0	30.0	30.0	30.0	30.0
		N.m	0.12	0.15	0.20	0.24	0.31	0.37	0.41	0.51	0.61	0.73	0.74	0.92	1.10	1.32	1.47	1.67	2.00	2.50	2.94	2.94	2.94	2.94	2.94

Motor Model	Gearhead Model	Gear Ratio	200	250
		r/min	7.5	6
6RDG□-6G	6GBD□MH	kgfcm	30.0	30.0
		N.m	2.94	2.94

1) Enter the phase & voltage code in the box (□) within the motor model name. 2) Enter the gear ratio in the box (□) within the gearhead model name.
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio. The actual speed is 2~20% less than the displayed value, depending on the size of the load.

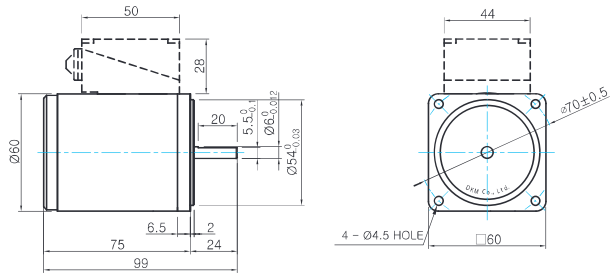
Motor Images

6RDD□-6	6RDD□-6-T	6RDG□-6G+6GBD□MH
		

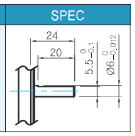
Dimensions

MOTOR ONLY

● MOTOR MODEL: 6RDD□–6(–T) (NO FAN)



● MOTOR OUTPUT SHAFT

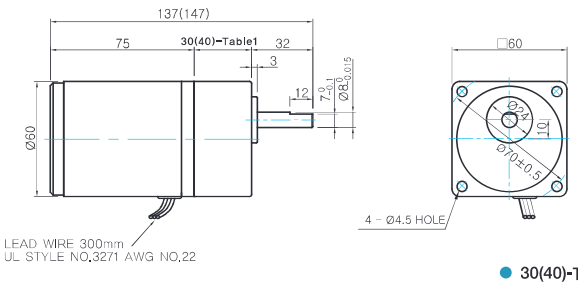
MODEL	SPEC
D-CUT TYPE	

GEARED MOTOR

G TYPE GEARHEAD

● MOTOR MODEL: 6RDG□–6G (NO FAN)

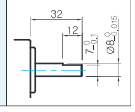
● GEARHEAD MODEL: 6GBD□MH



● 30(40)-Table1

SIZE(mm)	GEAR RATIO
30	6GBD3MH – 6GBD18MH
40	6GBD20MH – 6GBD250MH

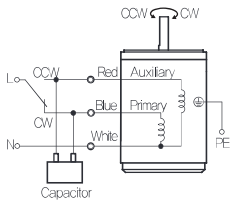
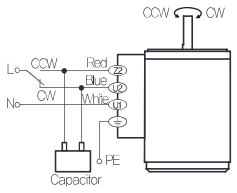
● GEARHEAD OUTPUT SHAFT

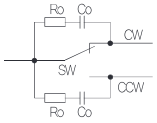
MODEL	SPEC
D-CUT TYPE	

WEIGHT

PART		WEIGHT(Kg)
MOTOR		0.7
GEAR HEAD	6GBD3MH ~ 6GBD18MH	0.3
	6GBD20MH ~ 6GBD40MH	0.32
	6GBD50MH ~ 6GBD250MH	0.34

Connection Diagrams

Lead Wire Type	Terminal Box Type
	



Code	Contact Capacity
SW	AC125V 5A min. or AC250V 5A min. (Inductive load)
Ro, Co	Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)

* Connect a CR circuit for surge suppression to protect the contact.

1) The direction of motor rotation is as viewed from the shaft end of the motor.
2) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
3) During operation it is available to change the rotating direction by turning the switch to CW or CCW.

B AC Motors

Reversible Motor 6W(□70mm)

6W Reversible Motor 6W(□70mm)

Motor Specification

Model 7RDG□-6G(-T): Gear Type Shaft 7RDD□-6(-T): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Starting Torque		Rated Load				Capacitor
									Speed	Current	Torque		
Lead Wire Type	Terminal Box Type	W	V	Hz			kgfcm	N.m	r/min	A	kgfcm	N.m	μF / VAC
7RDGA-6G	7RDGA-6G-T	6	1ø110	60	4	30min.	0.64	0.064	1600	0.29	0.50	0.050	3.0 / 250
7RDGD-6G	7RDGD-6G-T	6	1ø220	60	4	30min.	0.85	0.085	1600	0.16	0.60	0.060	1.0 / 450
7RDGE-6G	7RDGE-6G-T	6	1ø220	50	4	30min.	0.61	0.061	1250	0.13	0.68	0.068	0.8 / 450
			1ø240				0.75	0.075		0.14	0.76	0.076	

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) All models contain a built-in thermal protector.
3) Gear Type Shaft is for attaching gearhead and D-Cut Type Shaft is for using motor only.

Max. Permissible Torque at Output Shaft of Gearhead

60Hz

Motor Model	Gearhead Model	Gear Ratio	3	3.6	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
		r/min	600	500	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
7RDG□-6G	7GBK□BMH	kgfcm	1.5	1.8	3.0	3.7	4.5	6.2	7.5	9.0	11.3	13.5	14.7	20.4	24.5	30.6	36.7	40.8	49.0	50.0	50.0
		N.m	0.15	0.18	0.29	0.37	0.44	0.61	0.73	0.88	1.10	1.32	1.44	2.00	2.40	3.00	3.60	4.00	4.80	4.90	4.90

50Hz

Motor Model	Gearhead Model	Gear Ratio	3	3.6	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
		r/min	500	416	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3
7RDG□-6G	7GBK□BMH	kgfcm	1.7	2.0	3.4	4.2	5.1	7.1	8.5	10.2	12.8	15.3	16.6	23.1	27.7	34.7	41.6	46.2	50.0	50.0	50.0
		N.m	0.17	0.20	0.33	0.41	0.50	0.69	0.83	1.00	1.25	1.50	1.63	2.27	2.72	3.40	4.08	4.53	4.90	4.90	4.90

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) Enter the gear ratio in the box (□) within the gearhead model name.
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio. The actual speed is 2~20% less than the displayed value, depending on the size of the load.

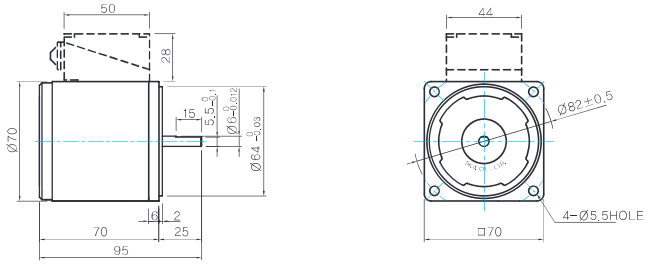
Motor Images

7RDD□-6	7RDD□-6-T	7RDG□-6G+7GBK□BMH
		

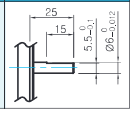
Dimensions

MOTOR ONLY

● MOTOR MODEL: 7RDD□-6(-T) (NO FAN)



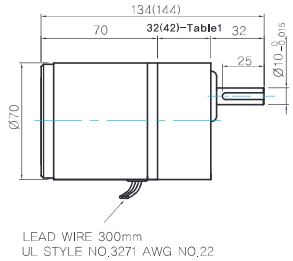
● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	

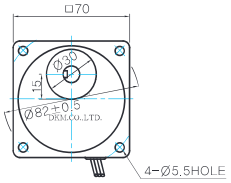
GEARED MOTOR

G TYPE GEARHEAD

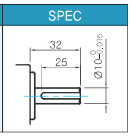
● MOTOR MODEL: 7RDG□-6G (NO FAN)



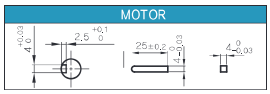
● GEARHEAD MODEL: 7GBK□BMH



● GEARHEAD OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	

● KEY SPEC



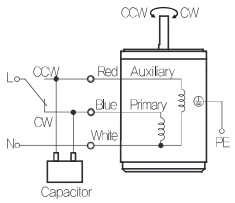
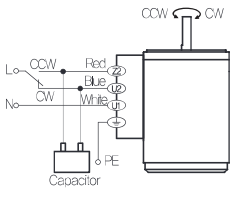
WEIGHT

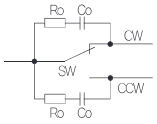
PART		WEIGHT(Kg)
MOTOR		0.84
GEAR HEAD	7GBK3BMH ~ 7GBK18BMH	0.36
	7GBK25BMH ~ 7GBK30BMH	0.44
	7GBK36MH ~ 7GBK180MH	0.5

● 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH – 7GBK18BMH
42	7GBK25BMH – 7GBK180BMH

Connection Diagrams

Lead Wire Type	Terminal Box Type
	



Code	Contact Capacity
SW	AC125V 5A min. or AC250V 5A min. (Inductive load)
Ro, Co	Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)

* Connect a CR circuit for surge suppression to protect the contact.

1) The direction of motor rotation is as viewed from the shaft end of the motor.
2) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
3) During operation it is available to change the rotating direction by turning the switch to CW or CCW.

B AC Motors

Reversible Motor 10W(□70mm)

10W Reversible Motor 10W(□70mm)

Motor Specification

Model 7RDG□-10G(-T): Gear Type Shaft 7RDD□-10(-T): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Starting Torque		Rated Load				Capacitor
									Speed	Current	Torque		
Lead Wire Type	Terminal Box Type	W	V	Hz			kgfcm	N.m	r/min	A	kgfcm	N.m	μF / VAC
7RDGA-10G	7RDGA-10G-T	10	1ø110	60	4	30min.	0.83	0.083	1550	0.31	0.70	0.070	3.5 / 250
7RDGD-10G	7RDGD-10G-T	10	1ø220	60	4	30min.	1.00	0.100	1550	0.20	0.79	0.079	1.2 / 450
7RDGE-10G	7RDGE-10G-T	10	1ø220	50	4	30min.	0.86	0.086	1250	0.16	0.82	0.082	1.0 / 450
			1ø240				0.99	0.099		0.18	0.90	0.090	

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) All models contain a built-in thermal protector.
3) Gear Type Shaft is for attaching gearhead and D-Cut Type Shaft is for using motor only.

Max. Permissible Torque at Output Shaft of Gearhead

60Hz

Motor Model	Gearhead Model	Gear Ratio	3	3.6	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
		r/min	600	500	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
7RDG□-10G	7GBK□BMH	kgfcm	2.0	2.4	3.9	4.9	5.9	8.2	9.8	11.8	14.8	17.8	19.3	26.9	32.2	40.3	48.3	50.0	50.0	50.0	50.0
		N.m	0.19	0.23	0.39	0.48	0.58	0.80	0.96	1.16	1.45	1.74	1.90	2.63	3.16	3.95	4.74	4.90	4.90	4.90	4.90

50Hz

Motor Model	Gearhead Model	Gear Ratio	3	3.6	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
		r/min	500	416	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3
7RDG□-10G	7GBK□BMH	kgfcm	2.2	2.7	4.5	5.6	6.7	9.3	11.2	13.4	16.9	20.3	22.0	30.6	36.7	45.9	50.0	50.0	50.0	50.0	50.0
		N.m	0.22	0.26	0.44	0.55	0.66	0.92	1.10	1.32	1.65	1.98	2.16	3.00	3.60	4.50	4.90	4.90	4.90	4.90	4.90

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) Enter the gear ratio in the box (□) within the gearhead model name.
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio. The actual speed is 2~20% less than the displayed value, depending on the size of the load.

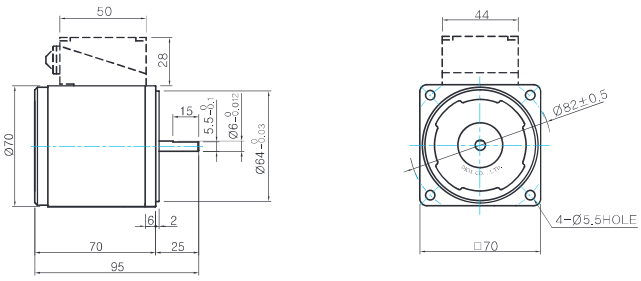
Motor Images

7RDD□-10	7RDD□-10-T	7RDG□-10G+7GBK□BMH
		

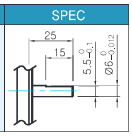
Dimensions

MOTOR ONLY

● MOTOR MODEL: 7RDD□-10(-T) (NO FAN)



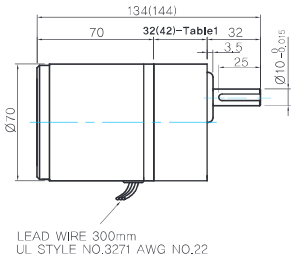
● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	

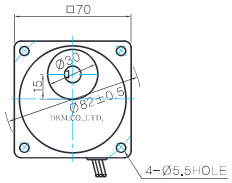
GEARED MOTOR

G TYPE GEARHEAD

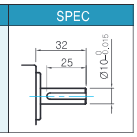
● MOTOR MODEL: 7RDG□-10G (NO FAN)



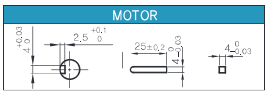
● GEARHEAD MODEL: 7GBK□BMH



● GEARHEAD OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	

● KEY SPEC



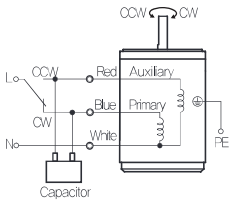
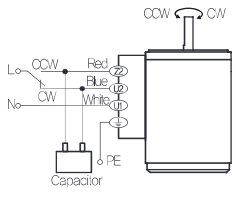
WEIGHT

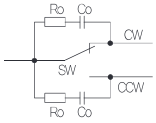
PART		WEIGHT(Kg)
MOTOR		0.84
GEAR HEAD	7GBK3BMH ~ 7GBK18BMH	0.36
	7GBK25BMH ~ 7GBK30BMH	0.44
	7GBK36MH ~ 7GBK180MH	0.5

● 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH - 7GBK18BMH
42	7GBK25BMH - 7GBK180BMH

Connection Diagrams

Lead Wire Type	Terminal Box Type
	



Code	Contact Capacity
SW	AC125V 5A min. or AC250V 5A min. (Inductive load)
Ro, Co	Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)

* Connect a CR circuit for surge suppression to protect the contact.

1) The direction of motor rotation is as viewed from the shaft end of the motor.
2) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
3) During operation it is available to change the rotating direction by turning the switch to CW or CCW.

B AC Motors

Reversible Motor 15W(□70mm)

15W Reversible Motor 15W(□70mm)

Motor Specification

Model 7RDG□-15G(-T): Gear Type Shaft 7RDD□-15(-T): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Starting Torque		Rated Load				Capacitor
									Speed	Current	Torque		
Lead Wire Type	Terminal Box Type	W	V	Hz			kgfcm	N.m	r/min	A	kgfcm	N.m	μF / VAC
7RDGA-15G	7RDGA-15G-T	15	1ø110	60	4	30min.	1.30	0.130	1600	0.46	1.05	0.105	6.0 / 250
7RDGD-15G	7RDGD-15G-T	15	1ø220	60	4	30min.	1.25	0.125	1600	0.23	1.10	0.110	1.5 / 450
7RDGE-15G	7RDGE-15G-T	15	1ø220	50	4	30min.	1.10	0.110	1250	0.17	1.25	0.125	1.2 / 450
			1ø240				1.30	0.130		0.18	1.45	0.145	

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) All models contain a built-in thermal protector.
3) Gear Type Shaft is for attaching gearhead and D-Cut Type Shaft is for using motor only.

Max. Permissible Torque at Output Shaft of Gearhead

60Hz

Motor Model	Gearhead Model	Gear Ratio	3	3.6	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
		r/min	600	500	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
7RDG□-15G	7GBK□BMH	kgfcm	2.7	3.3	5.5	6.8	8.2	11.4	13.7	16.4	20.6	24.8	26.9	37.4	44.9	50.0	50.0	50.0	50.0	50.0	50.0
		N.m	0.27	0.32	0.54	0.67	0.81	1.12	1.34	1.61	2.02	2.43	2.64	3.67	4.40	4.90	4.90	4.90	4.90	4.90	4.90

50Hz

Motor Model	Gearhead Model	Gear Ratio	3	3.6	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
		r/min	500	416	250	200	166	120	100	83	60	50	41	30	25	20	16	15	12.5	10	8.3
7RDG□-15G	7GBK□BMH	kgfcm	3.1	3.7	6.2	7.8	9.3	13.0	15.6	18.7	23.4	28.1	30.6	42.5	50.0	50.0	50.0	50.0	50.0	50.0	50.0
		N.m	0.31	0.37	0.61	0.76	0.92	1.27	1.53	1.83	2.30	2.76	3.00	4.17	4.90	4.90	4.90	4.90	4.90	4.90	4.90

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) Enter the gear ratio in the box (□) within the gearhead model name.
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio. The actual speed is 2~20% less than the displayed value, depending on the size of the load.

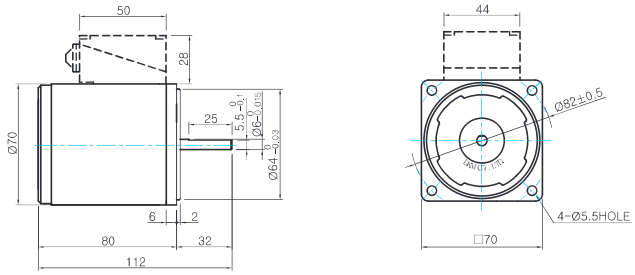
Motor Images

7RDD□-15	7RDD□-15-T	7RDG□-15G+7GBK□BMH
		

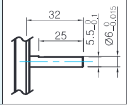
Dimensions

MOTOR ONLY

● MOTOR MODEL: 7RDD□-15(-T) (NO FAN)



● MOTOR OUTPUT SHAFT

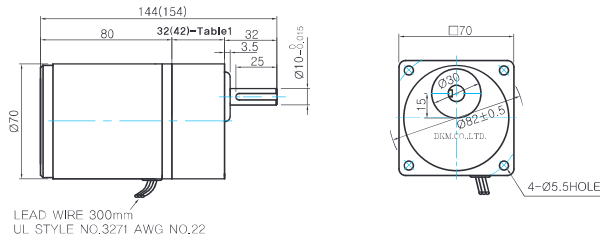
MODEL	SPEC
D-CUT TYPE	

GEARED MOTOR

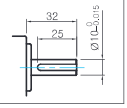
G TYPE GEARHEAD

● MOTOR MODEL: 7RDG□-15G (NO FAN)

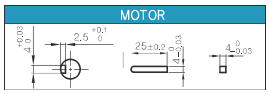
● GEARHEAD MODEL: 7GBK□BMH



● GEARHEAD OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	

● KEY SPEC

MOTOR


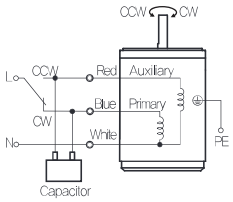
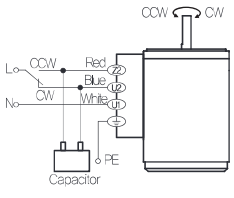
WEIGHT

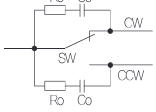
PART		WEIGHT(Kg)
MOTOR		1.04
GEAR HEAD	7GBK3BMH ~ 7GBK18BMH	0.36
	7GBK25BMH ~ 7GBK30BMH	0.44
	7GBK36MH ~ 7GBK180MH	0.5

● 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH - 7GBK18BMH
42	7GBK25BMH - 7GBK180BMH

Connection Diagrams

Lead Wire Type	Terminal Box Type
	



Code	Contact Capacity
SW	AC125V 5A min. or AC250V 5A min. (Inductive load)
Ro, Co	Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)

* Connect a CR circuit for surge suppression to protect the contact.

1) The direction of motor rotation is as viewed from the shaft end of the motor.
2) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
3) During operation it is available to change the rotating direction by turning the switch to CW or CCW.

B AC Motors

Reversible Motor 15W(□80mm)

15W Reversible Motor 15W(□80mm)

Motor Specification

Model 8RDG*–15□(–T): Gear Type Shaft 8RDD*–15(–T): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Starting Torque		Rated Load				Capacitor
									Speed	Current	Torque		
Lead Wire Type	Terminal Box Type	W	V	Hz			kgfcm	N.m	r/min	A	kgfcm	N.m	μF / VAC
8RDGA–15□	8RDGA–15□–T	15	1ø110	60	4	30min.	1.55	0.155	1600	0.44	1.20	0.120	6.0 / 250
8RDGD–15□	8RDGD–15□–T	15	1ø220	60	4	30min.	1.50	0.150	1600	0.25	1.00	0.100	1.5 / 450
8RDGE–15□	8RDGE–15□–T	15	1ø220	50	4	30min.	1.25	0.125	1200	0.16	1.30	0.130	1.5 / 450
			1ø240				1.45	0.145		0.17	1.40	0.140	

1) Enter the phase & voltage code in the place * and enter the model type of attaching gearhead in the box (□) within the motor model name.
2) All models contain a built-in thermal protector.
3) Gear Type Shaft is for attaching gearhead and D-Cut Type Shaft is for using motor only.

Max. Permissible Torque at Output Shaft of Gearhead

60Hz

Motor Model	Gearhead Model	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	40	50	60	75	90	100	120	150	180
		r/min	600	500	360	300	240	200	144	120	100	72	60	50	45	36	30	24	20	18	15	12	10
8RDG□–15G	8GBK□BMH	kgfcm	3.0	3.6	5.0	6.0	7.5	9.0	12.5	14.9	17.9	22.5	27.0	29.4	32.6	40.8	49.0	61.2	73.4	80.0	80.0	80.0	80.0
		N.m	0.29	0.35	0.49	0.59	0.73	0.88	1.22	1.46	1.76	2.21	2.65	2.88	3.20	4.00	4.80	6.00	7.20	7.84	7.84	7.84	7.84

Motor Model	Gearhead Model	Gear Ratio	200	250	300	360
		r/min	9	7	6	5
8RDG□–15G	8GBK□BMH	kgfcm	80.0	80.0	80.0	80.0
		N.m	7.84	7.84	7.84	7.84

Motor Model	Gearhead Model	Gear Ratio	10	12	15	18	25	30	36	50	60
		r/min	180	150	120	100	72	60	50	36	30
8RDG□–15W	8WD□BL/□BR/□BRL	kgfcm	9.8	11.5	13.9	16.0	21.0	23.8	27.6	36.0	39.6
		N.m	0.96	1.13	1.36	1.57	2.06	2.33	2.71	3.53	3.88

50Hz

Motor Model	Gearhead Model	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	40	50	60	75	90	100	120	150	180
		r/min	500	417	300	250	200	167	120	100	83	60	50	42	38	30	25	20	17	15	13	10	8
8RDG□–15G	8GBK□BMH	kgfcm	3.5	4.2	5.8	7.0	8.7	10.5	14.5	17.4	20.9	26.3	31.5	34.3	38.1	47.6	57.1	71.4	80.0	80.0	80.0	80.0	80.0
		N.m	0.34	0.41	0.57	0.68	0.85	1.02	1.42	1.71	2.05	2.57	3.09	3.36	3.73	4.66	5.60	7.00	7.84	7.84	7.84	7.84	7.84

Motor Model	Gearhead Model	Gear Ratio	200	250	300	360
		r/min	7	6	5	5
8RDG□–15G	8GBK□BMH	kgfcm	80.0	80.0	80.0	80.0
		N.m	7.84	7.84	7.84	7.84

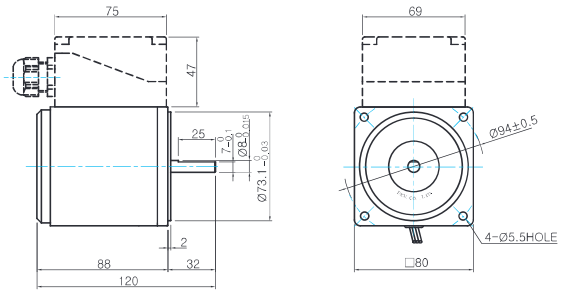
Motor Model	Gearhead Model	Gear Ratio	10	12	15	18	25	30	36	50	60
		r/min	150	125	100	83	60	50	42	30	25
8RDG□–15W	8WD□BL/□BR/□BRL	kgfcm	11.5	13.4	16.2	18.6	24.5	27.7	32.3	42.0	46.2
		N.m	1.13	1.32	1.58	1.83	2.40	2.72	3.16	4.12	4.53

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) Enter the gear ratio in the box (□) within the gearhead model name.
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio. The actual speed is 2~20% less than the displayed value, depending on the size of the load.

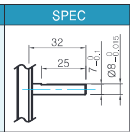
Dimensions

MOTOR ONLY

● MOTOR MODEL: 8RDD□-15(-T) (NO FAN)

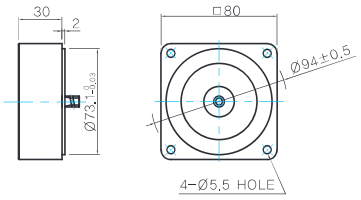


● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	

INTER-DECIMAL GEARHEAD

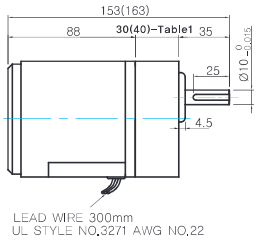
● MODEL: 8XD10M□



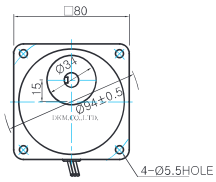
GEARED MOTOR

G TYPE GEARHEAD

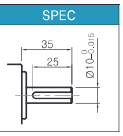
● MOTOR MODEL: 8RDG□-15G (NO FAN)



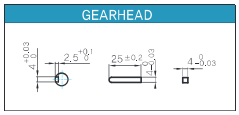
● GEARHEAD MODEL: 8GBK□BMH



● GEARHEAD OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	

● KEY SPEC

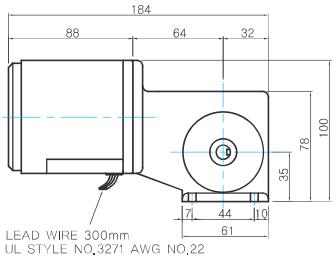


● 30(40)-Table1

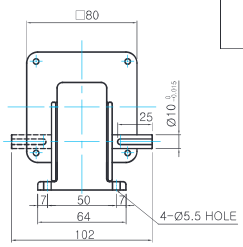
SIZE(mm)	GEAR RATIO
30	8GBK3BMH ~ 8GBK18BMH
40	8GBK25BMH ~ 8GBK360BMH

W TYPE GEARHEAD

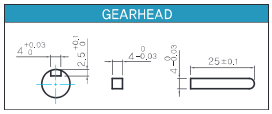
● MOTOR MODEL: 8RDG□-15W (NO FAN)



● GEARHEAD MODEL: 8WD□BL/BR/BRL



● KEY SPEC



WEIGHT

PART		WEIGHT(Kg)
MOTOR		1.6
GEAR HEAD	8GBK3BMH ~ 8GBK18BMH	0.48
	8GBK25BMH ~ 8GBK30BMH	0.61
	8GBK36BMH ~ 8GBK180BMH	0.67
	8GBK200BMH ~ 8GBK360BMH	0.63
	8WD□BL/BR/BRL	0.67
	8XD10M□	0.44

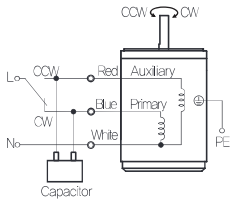
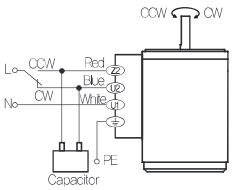
Motor Images

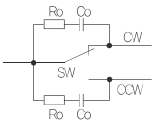
8RDD□-15	8RDD□-15-T	8RDG□-15G+8GBK□BMH	8RDG□-15W+8WD□BL
			

B AC Motors

Reversible Motor 15W(□80mm)

Connection Diagrams

Lead Wire Type	Terminal Box Type
	



Code	Contact Capacity
SW	AC125V 5A min. or AC250V 5A min. (Inductive load)
Ro, Co	Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)

* Connect a CR circuit for surge suppression to protect the contact.

1) The direction of motor rotation is as viewed from the shaft end of the motor.
2) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
3) During operation it is available to change the rotating direction by turning the switch to CW or CCW.

25W Reversible Motor 25W(□80mm)

Motor Specification

Model 8RDG*-25□(-T): Gear Type Shaft 8RDD*-25(-T): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Starting Torque		Rated Load				Capacitor
									Speed	Current	Torque		
Lead Wire Type	Terminal Box Type	W	V	Hz			kgfcm	N.m	r/min	A	kgfcm	N.m	μF / VAC
8RDGA-25□	8RDGA-25□-T	25	1ø110	60	4	30min.	2.40	0.240	1550	0.73	1.62	0.162	10.0 / 250
8RDGD-25□	8RDGD-25□-T	25	1ø220	60	4	30min.	2.40	0.240	1550	0.36	1.62	0.162	2.5 / 450
8RDGE-25□	8RDGE-25□-T	25	1ø220	50	4	30min.	2.10	0.210	1250	0.28	2.00	0.200	2.0 / 450
			1ø240				2.50	0.250		0.30	2.10	0.210	

1) Enter the phase & voltage code in the place * and enter the model type of attaching gearhead in the box (□) within the motor model name.
2) All models contain a built-in thermal protector.
3) Gear Type Shaft is for attaching gearhead and D-Cut Type Shaft is for using motor only.

Max. Permissible Torque at Output Shaft of Gearhead

60Hz

Motor Model	Gearhead Model	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	40	50	60	75	90	100	120	150	180
		r/min	600	500	360	300	240	200	144	120	100	72	60	50	45	36	30	24	20	18	15	12	10
8RDG□-25G	8GBK□ BMH	kgfcm	4.0	4.8	6.7	8.1	10.1	12.1	16.8	20.2	24.2	30.38	36.45	39.66	44.06	55.08	66.10	80.00	80.00	80.00	80.00	80.00	80.00
		N.m	0.40	0.47	0.66	0.79	0.99	1.19	1.65	1.98	2.37	2.98	3.57	3.89	4.32	5.40	6.48	7.84	7.84	7.84	7.84	7.84	7.84

Motor Model	Gearhead Model	Gear Ratio	200	250	300	360
		r/min	9	7	6	5
8RDG□-25G	8GBK□BMH	kgfcm	80.0	80.0	80.0	80.0
		N.m	7.84	7.84	7.84	7.84

Motor Model	Gearhead Model	Gear Ratio	10	12	15	18	25	30	36	50	60
		r/min	180	150	120	100	72	60	50	36	30
8RDG□-25W	8WD□BL/□BR/ □BRL	kgfcm	13.3	15.6	18.7	21.6	28.4	32.1	37.3	48.6	53.5
		N.m	1.30	1.52	1.83	2.11	2.78	3.14	3.66	4.76	5.24

50Hz

Motor Model	Gearhead Model	Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	40	50	60	75	90	100	120	150	180
		r/min	500	417	300	250	200	167	120	100	83	60	50	42	38	30	25	20	17	15	13	10	8
8RDG□-25G	8GBK□ BMH	kgfcm	5.2	6.3	8.7	10.5	13.1	15.7	21.8	26.1	31.4	39.4	47.3	51.4	57.1	71.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0
		N.m	0.51	0.61	0.85	1.02	1.28	1.54	2.14	2.56	3.07	3.86	4.63	5.04	5.60	7.00	7.84	7.84	7.84	7.84	7.84	7.84	7.84

Motor Model	Gearhead Model	Gear Ratio	200	250	300	360
		r/min	7	6	5	5
8RDG□-25G	8GBK□BMH	kgfcm	80.0	80.0	80.0	80.0
		N.m	7.84	7.84	7.84	7.84

Motor Model	Gearhead Model	Gear Ratio	10	12	15	18	25	30	36	50	60
		r/min	150	125	100	83	60	50	42	30	25
8RDG□-25W	8WD□BL/□BR/ □BRL	kgfcm	17.2	20.2	24.3	28.0	36.8	41.6	48.4	63.0	69.3
		N.m	1.69	1.98	2.38	2.74	3.60	4.07	4.74	6.17	6.79

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) Enter the gear ratio in the box (□) within the gearhead model name.
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio.
The actual speed is 2~20% less than the displayed value, depending on the size of the load.

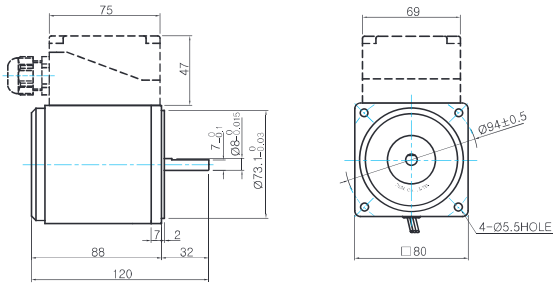
B AC Motors

Reversible Motor 25W(□80mm)

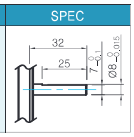
Dimensions

MOTOR ONLY

● MOTOR MODEL: 8RDD□-25(-T) (NO FAN)

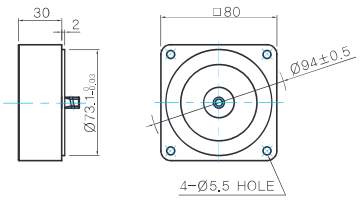


● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	

INTER-DECIMAL GEARHEAD

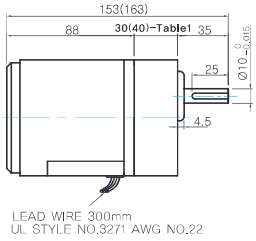
● MODEL: 8XD10M□



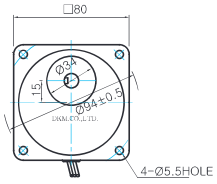
GEARED MOTOR

G TYPE GEARHEAD

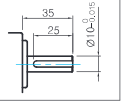
● MOTOR MODEL: 8RDG□-25G (NO FAN)



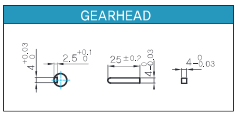
● GEARHEAD MODEL: 8GBK□BMH



● GEARHEAD OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	

● KEY SPEC

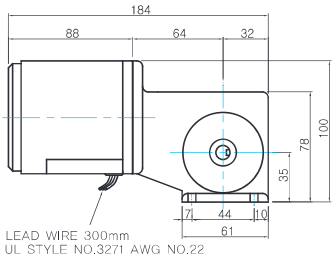
GEARHEAD


● 30(40)-Table1

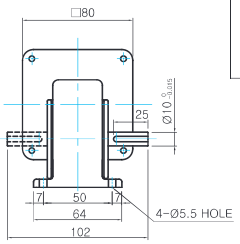
SIZE(mm)	GEAR RATIO
30	8GBK3BMH – 8GBK18BMH
40	8GBK25BMH – 8GBK360BMH

W TYPE GEARHEAD

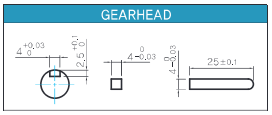
● MOTOR MODEL: 8RDG□-25W (NO FAN)



● GEARHEAD MODEL: 8WD□BL/BR/BRL



● KEY SPEC

GEARHEAD


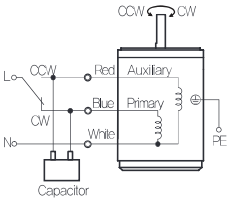
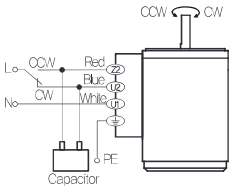
WEIGHT

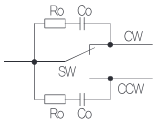
PART		WEIGHT(Kg)
MOTOR		1.6
GEAR HEAD	8GBK3BMH ~ 8GBK18BMH	0.48
	8GBK25BMH ~ 8GBK30BMH	0.61
	8GBK36BMH ~ 8GBK180BMH	0.67
	8GBK200BMH ~ 8GBK360BMH	0.63
	8WD□BL/BR/BRL	0.67
	8XD10M□	0.44

Motor Images

8RDD□-25	8RDD□-25-T	8RDG□-25G+8GBK□BMH	8RDG□-25W+8WD□BL
			

Connection Diagrams

Lead Wire Type	Terminal Box Type
	



Code	Contact Capacity
SW	AC125V 5A min. or AC250V 5A min. (Inductive load)
Ro, Co	Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)

* Connect a CR circuit for surge suppression to protect the contact.

1) The direction of motor rotation is as viewed from the shaft end of the motor.
2) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
3) During operation it is available to change the rotating direction by turning the switch to CW or CCW.

B AC Motors

Reversible Motor 40W(□90mm)

40W Reversible Motor 40W(□90mm)

Motor Specification

Model 9RDG*-40□(-T): Gear Type Shaft 9RDD*-40(-T): D-Cut Type Shaft 9RDK*-40(-T): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Starting Torque		Rated Load				Capacitor
									Speed	Current	Torque		
Lead Wire Type	Terminal Box Type	W	V	Hz			kgfcm	N.m	r/min	A	kgfcm	N.m	μF / VAC
9RDGA-40□	9RDGA-40□-T	40	1ø110	60	4	30min.	4.20	0.420	1600	1.25	2.60	0.260	16.0 / 250
9RDGD-40□	9RDGD-40□-T	40	1ø220	60	4	30min.	4.20	0.420	1600	0.61	2.60	0.260	4.0 / 450
9RDGE-40□	9RDGE-40□-T	40	1ø220	50	4	30min.	3.00	0.300	1350	0.36	3.00	0.300	3.0 / 450
			1ø240				3.60	0.360		0.39	3.40	0.340	

1) Enter the phase & voltage code in the place * and enter the model type of attaching gearhead in the box (□) within the motor model name.
2) All models contain a built-in thermal protector.
3) Gear Type Shaft is for attaching gearhead and D-Cut & Key Type Shafts are for using motor only.

Max. Permissible Torque at Output Shaft of Gearhead

60Hz

Motor Model	Gearhead Model	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	25	30	36	40	50	60	75	90	100	120	150	180
		r/min	900	600	500	360	300	240	200	180	144	120	100	72	60	50	45	36	30	24	20	18	15	12	10
9RDG□-40G	9GBK□BMH	kgfcm	4.3	6.5	7.8	10.8	12.9	16.2	19.4	21.6	27.0	32.4	35.1	48.8	58.5	63.6	70.7	88.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		N.m	0.42	0.63	0.76	1.06	1.27	1.59	1.90	2.11	2.64	3.17	3.44	4.78	5.73	6.24	6.93	8.66	9.80	9.80	9.80	9.80	9.80	9.80	9.80

Motor Model	Gearhead Model	Gear Ratio	10	12	15	18	25	30	36	50	60
		r/min	180	150	120	100	72	60	50	36	30
9RDG□-40W	9WD□BL/□BR/□BRL	kgfcm	21.3	25.0	30.0	34.6	45.5	51.5	59.9	78.0	85.8
		N.m	2.09	2.45	2.94	3.39	4.46	5.05	5.87	7.64	8.41

50Hz

Motor Model	Gearhead Model	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	25	30	36	40	50	60	75	90	100	120	150	180
		r/min	750	500	417	300	250	200	167	150	120	100	83	60	50	42	38	30	25	20	17	15	13	10	8
9RDG□-40G	9GBK□BMH	kgfcm	5.6	8.5	10.2	14.1	16.9	21.2	25.4	28.2	35.3	42.3	45.9	63.8	76.5	83.2	92.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		N.m	0.55	0.83	1.00	1.38	1.66	2.07	2.49	2.77	3.46	4.15	4.50	6.25	7.50	8.16	9.06	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80

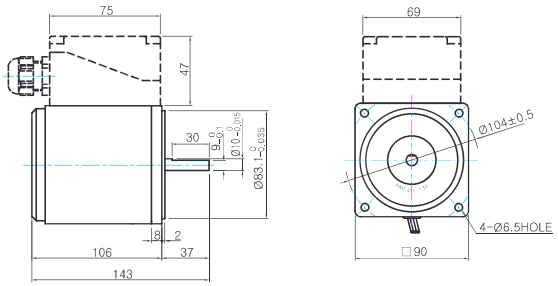
Motor Model	Gearhead Model	Gear Ratio	10	12	15	18	25	30	36	50	60
		r/min	150	125	100	83	60	50	42	30	25
9RDG□-40W	9WD□BL/□BR/□BRL	kgfcm	27.9	32.6	39.3	45.3	59.5	67.3	78.3	102.0	112.2
		N.m	2.73	3.20	3.85	4.44	5.83	6.60	7.68	10.00	11.00

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) Enter the gear ratio in the box (□) within the gearhead model name.
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio. The actual speed is 2~20% less than the displayed value, depending on the size of the load.

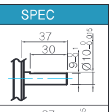
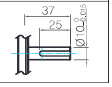
Dimensions

MOTOR ONLY

● MOTOR MODEL: 9RDD□-40(-T) (NO FAN)

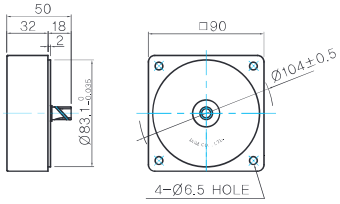


● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
9RDD□-40	
KEY TYPE	
9RDK□-40	

INTER-DECIMAL GEARHEAD

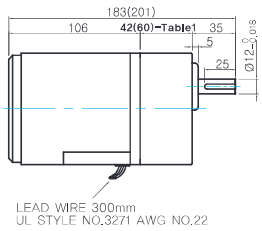
● MODEL: 9XD10M□



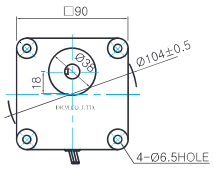
GEARED MOTOR

G TYPE GEARHEAD

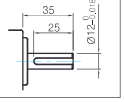
● MOTOR MODEL: 9RDG□-40G (NO FAN)



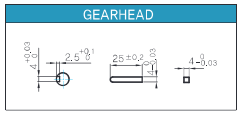
● GEARHEAD MODEL: 9GBK□BMH



● GEARHEAD OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	

● KEY SPEC

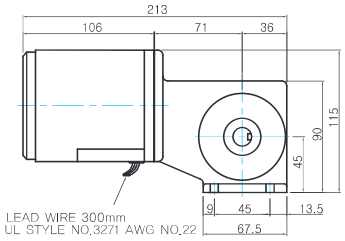


● 42(60)-Table1

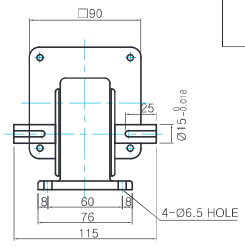
SIZE(mm)	GEAR RATIO
42	9GBK2BMH ~ 9GBK15BMH
60	9GBK18BMH ~ 9GBK180BMH

W TYPE GEARHEAD

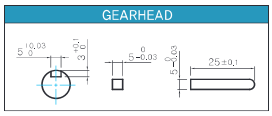
● MOTOR MODEL: 9RDG□-40W (NO FAN)



● GEARHEAD MODEL: 9WD□BL/BR/BRL



● KEY SPEC



WEIGHT

PART		WEIGHT(Kg)
MOTOR		2.4
GEAR HEAD	9GBK2BMH ~ 9GBK15BMH	0.67
	9GBK18BMH ~ 9GBK30BMH	0.96
	9GBK36BMH ~ 9GBK180BMH	1.07
	9WD□BL/BR/BRL	1.0
	9XD10M□	0.5

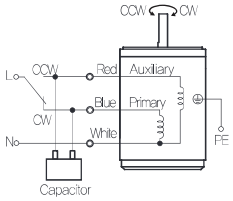
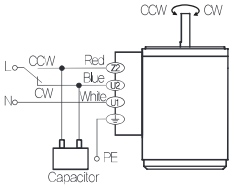
B AC Motors

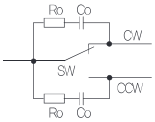
Reversible Motor 40W(□90mm)

Motor Images

9RDD□-40	9RDD□-40-T	9RDG□-40G+9GBK□BMH	9RDG□-40W+9WD□BL
			

Connection Diagrams

Lead Wire Type	Terminal Box Type
	



Code	Contact Capacity
SW	AC125V 5A min. or AC250V 5A min. (Inductive load)
Ro, Co	Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)

* Connect a CR circuit for surge suppression to protect the contact.

1) The direction of motor rotation is as viewed from the shaft end of the motor.
2) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
3) During operation it is available to change the rotating direction by turning the switch to CW or CCW.

60W Reversible Motor 60W(□90mm)

Motor Specification

Model 9RDG*-60F□(-T): Gear Type Shaft 9RDD*-60F(-T): D-Cut Type Shaft 9RDK*-60F(-T): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Starting Torque		Rated Load				Capacitor
									Speed	Current	Torque		
		W	V	Hz			kgfcm	N.m	r/min	A	kgfcm	N.m	μF / VAC
Lead Wire Type	Terminal Box Type												
9RDGA-60F□	9RDGA-60F□-T	60	1ø110	60	4	30min.	5.20	0.520	1600	1.60	5.00	0.500	20.0 / 250
9RDGD-60F□	9RDGD-60F□-T	60	1ø220	60	4	30min.	5.00	0.500	1600	0.75	4.60	0.460	5.0 / 450
9RDGE-60F□	9RDGE-60F□-T	60	1ø220	50	4	30min.	5.40	0.540	1300	0.59	5.00	0.500	5.0 / 450
			1ø240				6.60	0.660		0.64	5.60	0.560	

1) Enter the phase & voltage code in the place * and enter the model type of attaching gearhead in the box (□) within the motor model name.
2) All models contain a built-in thermal protector.
3) Gear Type Shaft is for attaching gearhead and D-Cut & Key Type Shafts are for using motor only.

Max. Permissible Torque at Output Shaft of Gearhead

60Hz

Motor Model	Gearhead Model	Gear Ratio	2	3	3.6	5	6	7.5	9	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180
		r/min	900	600	500	360	300	240	200	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10
9RDG□ -60FP	9PBK□BH 9PFK□BH	kgfcm	7.6	11.5	13.7	19.1	22.9	28.6	34.4	43.1	51.8	62.1	62.6	78.2	93.8	112.6	125.1	156.4	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	0.75	1.12	1.35	1.87	2.24	2.81	3.37	4.23	5.07	6.09	6.13	7.66	9.20	11.04	12.26	15.33	19.60	19.60	19.60	19.60	19.60	19.60	19.60
9RDG□ -60FH	9HBK□BH 9HFK□BH	kgfcm	–	11.5	13.7	–	22.9	–	34.4	43.1	51.8	62.1	62.6	88.2	93.8	112.6	–	156.4	187.7	210.5	252.5	300.0	300.0	300.0	300.0
		N.m		1.12	1.35		2.24		3.37	4.23	5.07	6.09	6.13	7.66	9.20	11.04		15.33	18.39	20.62	24.75	29.40	29.40	29.40	29.40

Motor Model	Gearhead Model	Gear Ratio	10	12	15	18	25	30	36	50	60
		r/min	180	150	120	100	72	60	50	36	30
9RDG□ -60FW	9WD□BL/ □BR/□BRL	kgfcm	37.7	44.2	53.1	61.3	80.5	91.1	106.0	142.9	122.4
		N.m	3.70	4.33	5.21	6.00	7.89	8.93	10.39	14.00	12.00

Motor Model	Gearhead Model	Gear Ratio	7.5	10	15	20	25	30	40	50	60	80
		r/min	240	180	120	90	72	60	45	36	30	22
9RDG□ -60FWH	9WHD□	kgfcm	29.0	37.3	52.4	66.2	75.9	88.3	108.6	124.2	138.0	132.7
		N.m	2.84	3.65	5.14	6.49	7.44	8.66	10.64	12.17	13.52	13.00

50Hz

Motor Model	Gearhead Model	Gear Ratio	2	3	3.6	5	6	7.5	9	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180
		r/min	750	500	417	300	250	200	167	120	100	83	75	60	50	42	38	30	25	20	17	15	13	10	8
9RDG□ -60FP	9PBK□BH 9PFK□BH	kgfcm	9.3	13.9	16.7	23.2	27.9	34.9	41.8	52.5	63.0	75.6	76.2	95.2	114.2	137.1	152.3	190.4	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	0.91	1.37	1.64	2.28	2.73	3.42	4.10	5.15	6.17	7.41	7.46	9.33	11.20	13.43	14.93	18.66	19.60	19.60	19.60	19.60	19.60	19.60	19.60

Motor Model	Gearhead Model	Gear Ratio	10	12	15	18	25	30	36	50	60
		r/min	150	125	100	83	60	50	42	30	25
9RDG□ -60FW	9WD□BL/ □BR/□BRL	kgfcm	45.9	53.8	64.7	74.6	98.0	110.9	129.0	142.9	122.4
		N.m	4.50	5.27	6.34	7.31	9.60	10.87	12.64	14.00	12.00

Motor Model	Gearhead Model	Gear Ratio	7.5	10	15	20	25	30	40	50	60	80
		r/min	200	150	100	75	60	50	38	30	25	18
9RDG□ -60FWH	9WHD□	kgfcm	35.3	45.4	63.8	80.6	92.4	107.5	132.2	151.2	163.3	132.7
		N.m	3.46	4.45	6.26	7.90	9.06	10.54	12.95	14.82	16.00	13.00

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) Enter the gear ratio in the box (□) within the gearhead model name.
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio. The actual speed is 2~20% less than the displayed value, depending on the size of the load.

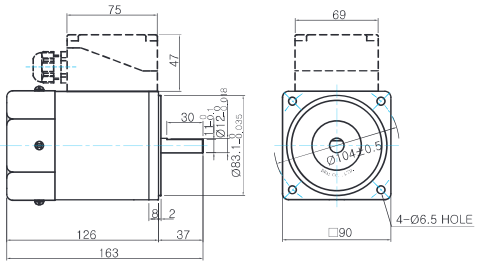
B AC Motors

Reversible Motor 60W(□90mm)

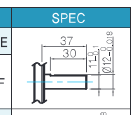
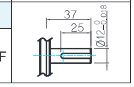
Dimensions

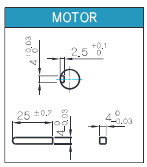
MOTOR ONLY

● MOTOR MODEL:
9RDD□-60F(-T) (GENERAL FAN)



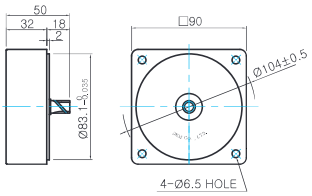
● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
9RDD□-60F	
KEY TYPE	
9RDK□-60F	

MOTOR


INTER-DECIMAL GEARHEAD

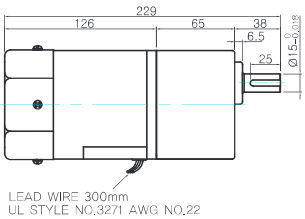
● MODEL: 9XD10M□



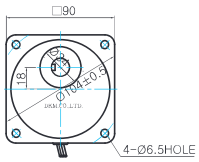
GEARED MOTOR

P TYPE GEARHEAD

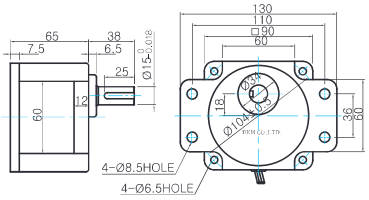
● MOTOR MODEL:
9RDG□-60FP (GENERAL FAN)



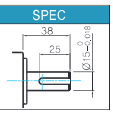
● GEARHEAD MODEL:
9PBK□BH



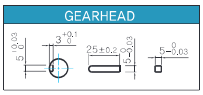
● GEARHEAD MODEL:
9PFK□BH



● GEARHEAD OUTPUT SHAFT

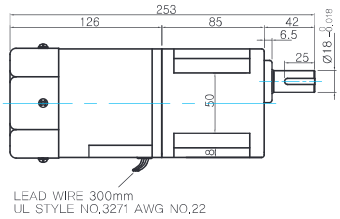
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

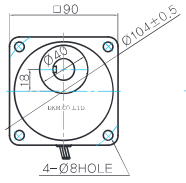
GEARHEAD


H TYPE GEARHEAD

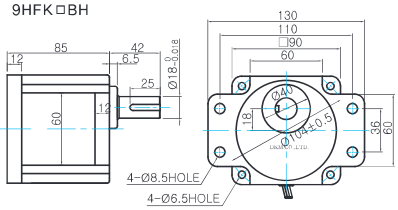
● MOTOR MODEL:
9RDG□-60FH (GENERAL FAN)



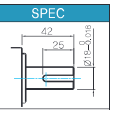
● GEARHEAD MODEL:
9HBK□BH



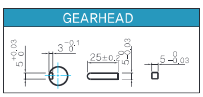
● GEARHEAD MODEL:
9HFK□BH



● GEARHEAD OUTPUT SHAFT

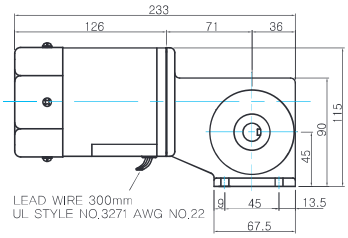
MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC

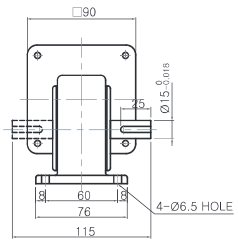
GEARHEAD


W TYPE GEARHEAD

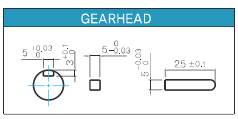
● MOTOR MODEL:
9RDG□-60FW (GENERAL FAN)



● GEARHEAD MODEL:
9WD□BL/BR/BRL

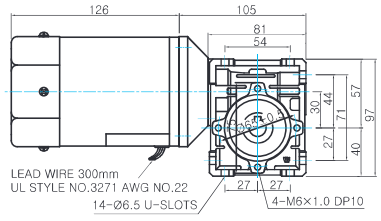


● KEY SPEC

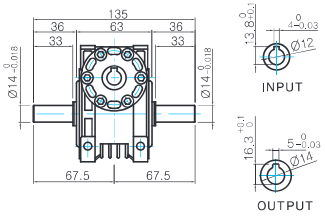
GEARHEAD


WH TYPE GEARHEAD

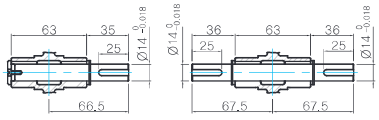
● MOTOR MODEL:
9RDG□-90FWH (GENERAL FAN)



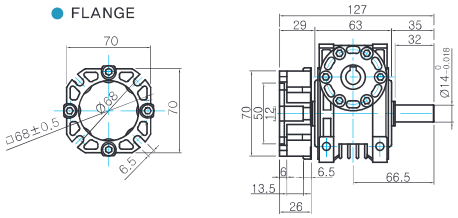
● GEARHEAD MODEL:
9WHD□



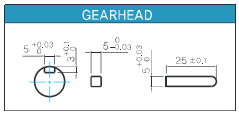
● SHAFT(Unidirectional, Bi-directional)



● FLANGE



● KEY SPEC



WEIGHT

PART		WEIGHT(Kg)
MOTOR		3.0
GEAR HEAD	9PB(F)K2BH ~ 9PB(F)K18BH	1.3
	9PB(F)K20BH ~ 9PB(F)K180BH	1.4
	9HB(F)K3BH ~ 9HB(F)K9BH	1.45
	9HB(F)K12.5BH ~ 9HB(F)K18BH	1.5
	9HB(F)K20BH ~ 9HB(F)K60BH	1.7
	9HB(F)K75BH ~ 9HB(F)K180BH	1.8
	9WD□BL/BR/BRL	1.0
	9WHD□	1.13
	9XD10M□	0.5

* The output flange and shafts are sold separately.

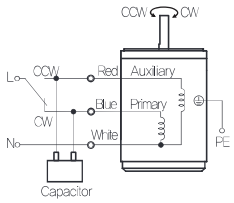
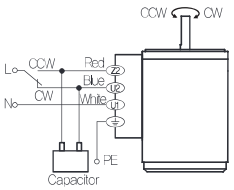
Motor Images

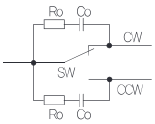
9RDD□-60F	9RDD□-60F-T	9RDG□-60FP+9PBK□BH	9RDG□-60FP+9PFK□BH
			
9RDG□-60FH+9HBK□BH	**9RDG□-60FH+9HFK□BH**	**9RDG□-60FW+9WD□BL**	**9RDG□-60FWH+9WHD□**
			

B AC Motors

Reversible Motor 60W(□90mm)

Connection Diagrams

Lead Wire Type	Terminal Box Type
	



Code	Contact Capacity
SW	AC125V 5A min. or AC250V 5A min. (Inductive load)
Ro, Co	Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)

* Connect a CR circuit for surge suppression to protect the contact.

1) The direction of motor rotation is as viewed from the shaft end of the motor.
2) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
3) During operation it is available to change the rotating direction by turning the switch to CW or CCW.

90W Reversible Motor 90W(□90mm)

Motor Specification

Model 9RDG*-90F□(-T): Gear Type Shaft 9RDD*-90F(-T): D-Cut Type Shaft 9RDK*-90F(-T): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Starting Torque		Rated Load				Capacitor
									Speed	Current	Torque		
		W	V	Hz			kgfcm	N.m	r/min	A	kgfcm	N.m	μF / VAC
Lead Wire Type	Terminal Box Type												
9RDGA-90F□	9RDGA-90F□-T	90	1ø110	60	4	30min.	6.60	0.660	1600	2.00	6.40	0.640	25.0 / 250
9RDGD-90F□	9RDGD-90F□-T	90	1ø220	60	4	30min.	6.00	0.600	1600	0.97	6.60	0.660	6.0 / 450
9RDGE-90F□	9RDGE-90F□-T	90	1ø220	50	4	30min.	6.40	0.640	1250	0.90	7.80	0.780	6.0 / 450
			1ø240				7.80	0.780		1.00	8.90	0.890	

1) Enter the phase & voltage code in the place * and enter the model type of attaching gearhead in the box (□) within the motor model name.
2) All models contain a built-in thermal protector.
3) Gear Type Shaft is for attaching gearhead and D-Cut & Key Type Shafts are for using motor only.

Max. Permissible Torque at Output Shaft of Gearhead

60Hz

Motor Model	Gearhead Model	Gear Ratio	2	3	3.6	5	6	7.5	9	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180
		r/min	900	600	500	360	300	240	200	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10
9RDG□ -90FP	9PBK□BH 9PFK□BH	kgfcm	11.0	16.4	19.7	27.4	32.9	41.1	49.3	61.9	74.3	89.1	89.76	112.2	134.6	161.1	179.5	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	1.07	1.61	1.93	2.68	3.22	4.03	4.83	6.06	7.28	8.73	8.80	11.00	13.19	15.83	17.59	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
9RDG□ -90FH	9HBK□BH 9HFK□BH	kgfcm	–	16.4	19.7	–	32.9	–	49.3	61.9	74.3	89.1	89.8	112.2	134.6	161.6	–	224.4	269.3	300.0	300.0	300.0	300.0	300.0	300.0
		N.m		1.61	1.93		3.22		4.83	6.06	7.28	8.73	8.80	11.00	13.19	15.83		21.99	26.39	29.40	29.40	29.40	29.40	29.40	29.40

Motor Model	Gearhead Model	Gear Ratio	10	12	15	18	25	30	36	50	60
		r/min	180	150	120	100	72	60	50	36	30
9RDG□ -90FW	9WD□BL/ □BR/□BRL	kgfcm	54.1	63.4	76.2	87.9	115.5	130.7	153.1	142.9	122.4
		N.m	5.30	6.21	7.47	8.62	11.32	12.81	15.00	14.00	12.00

Motor Model	Gearhead Model	Gear Ratio	7.5	10	15	20	25	30	40	50	60	80
		r/min	240	180	120	90	72	60	45	36	30	22
9RDG□ -90FWH	9WHD□	kgfcm	41.6	53.5	75.2	95.0	108.9	126.7	155.8	173.5	163.3	132.7
		N.m	4.07	5.24	7.37	9.31	10.67	12.42	15.26	17.00	16.00	13.00

50Hz

Motor Model	Gearhead Model	Gear Ratio	2	3	3.6	5	6	7.5	9	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180
		r/min	750	500	417	300	250	200	167	120	100	83	75	60	50	42	38	30	25	20	17	15	13	10	8
9RDG□ -90FP	9PBK□BH 9PFK□BH	kgfcm	12.9	19.4	23.3	32.4	38.8	48.6	58.3	73.1	87.8	105.3	106.1	132.6	159.1	190.9	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	1.27	1.90	2.28	3.17	3.81	4.76	5.71	7.17	8.60	10.32	10.40	12.99	15.59	18.71	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
9RDG□ -90FH	9HBK□BH 9HFK□BH	kgfcm	–	19.4	23.3	–	38.8	–	58.3	73.1	87.8	105.3	106.1	132.6	159.1	190.9	–	265.2	300.0	300.0	300.0	300.0	300.0	300.0	300.0
		N.m		1.90	2.28		3.81		5.71	7.17	8.60	10.32	10.40	12.99	15.59	18.71		25.99	29.40	29.40	29.40	29.40	29.40	29.40	29.40

Motor Model	Gearhead Model	Gear Ratio	10	12	15	18	25	30	36	50	60
		r/min	150	125	100	83	60	50	42	30	25
9RDG□ -90FW	9WD□BL/ □BR/□BRL	kgfcm	64.0	74.9	90.1	103.9	136.5	154.4	153.1	142.9	122.4
		N.m	6.27	7.34	8.83	10.18	13.38	15.14	15.00	14.00	12.00

Motor Model	Gearhead Model	Gear Ratio	7.5	10	15	20	25	30	40	50	60	80
		r/min	200	150	100	75	60	50	38	30	25	18
9RDG□ -90FWH	9WHD□	kgfcm	49.1	63.2	88.9	112.3	128.7	149.8	183.7	173.5	163.3	132.7
		N.m	4.82	6.19	8.71	11.01	12.61	14.68	18.00	17.00	16.00	13.00

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) Enter the gear ratio in the box (□) within the gearhead model name.
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio.
The actual speed is 2~20% less than the displayed value, depending on the size of the load.

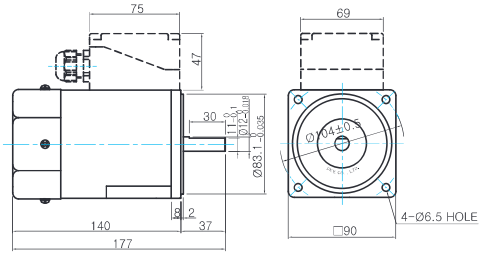
B AC Motors

Reversible Motor 90W(□90mm)

Dimensions

MOTOR ONLY

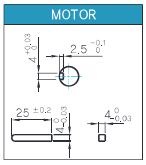
● MOTOR MODEL:
9RDD□-90F(-T) (GENERAL FAN)



● MOTOR OUTPUT SHAFT

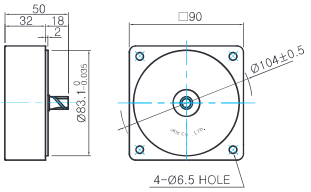
MODEL	SPEC
D-CUT TYPE	
9RDD□-90F	
KEY TYPE	
9RDK□-90F	

● KEY SPEC



INTER-DECIMAL GEARHEAD

● MODEL: 9XD10M□



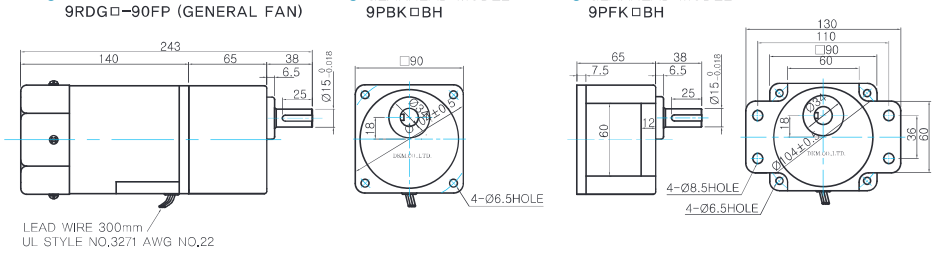
GEARED MOTOR

P TYPE GEARHEAD

● MOTOR MODEL:
9RDG□-90FP (GENERAL FAN)

● GEARHEAD MODEL:
9PBK□BH

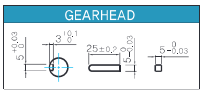
● GEARHEAD MODEL:
9PFK□BH



● GEARHEAD OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

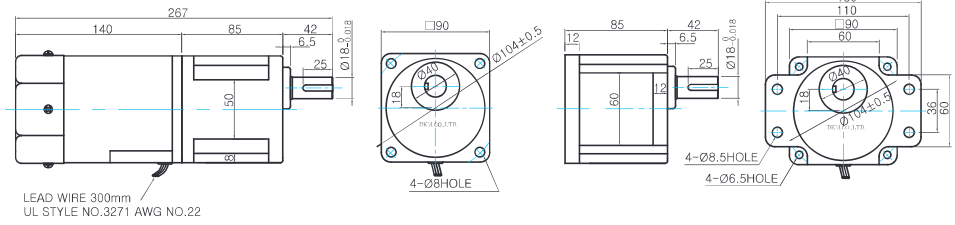


H TYPE GEARHEAD

● MOTOR MODEL:
9RDG□-90FH (GENERAL FAN)

● GEARHEAD MODEL:
9HBK□BH

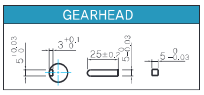
● GEARHEAD MODEL:
9HFK□BH



● GEARHEAD OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC

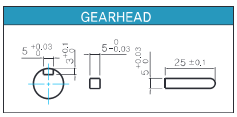


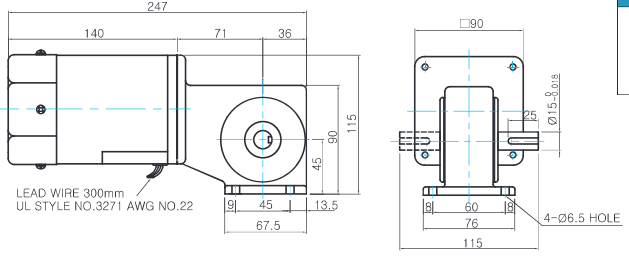
W TYPE GEARHEAD

● MOTOR MODEL:
9RDG□-90FW (GENERAL FAN)

● GEARHEAD MODEL:
9WD□BL/BR/BRL

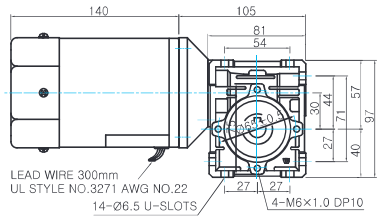
● KEY SPEC



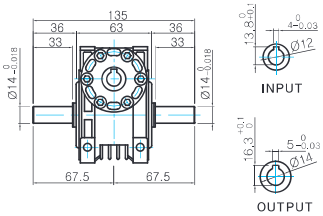


WH TYPE GEARHEAD

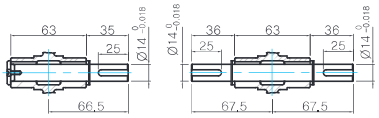
● MOTOR MODEL:
9RDG□-90FWH (GENERAL FAN)



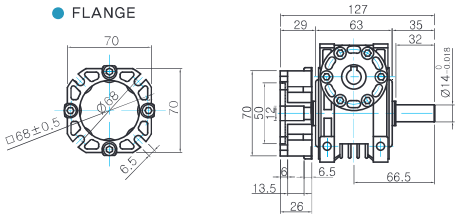
● GEARHEAD MODEL:
9WHD□



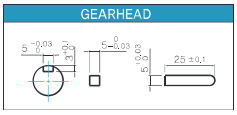
● SHAFT(Unidirectional, Bi-directional)



● FLANGE



● KEY SPEC



* The output flange and shafts are sold separately.

WEIGHT

PART		WEIGHT(Kg)
MOTOR		3.0
GEAR HEAD	9PB(F)K2BH ~ 9PB(F)K18BH	1.3
	9PB(F)K20BH ~ 9PB(F)K180BH	1.4
	9HB(F)K3BH ~ 9HB(F)K9BH	1.45
	9HB(F)K12.5BH ~ 9HB(F)K18BH	1.5
	9HB(F)K20BH ~ 9HB(F)K60BH	1.7
	9HB(F)K75BH ~ 9HB(F)K180BH	1.8
	9WD□BL/BR/BRL	1.0
	9WHD□	1.13
	9XD10M□	0.5

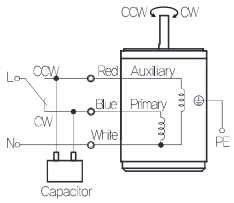
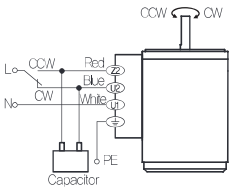
Motor Images

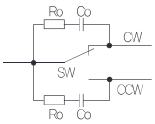
9RDD□-90F	9RDD□-90F-T	9RDG□-90FP+9PBK□BH	9RDG□-90FP+9PFK□BH
			
9RDG□-90FH+9HBK□BH	**9RDG□-90FH+9HFK□BH**	**9RDG□-90FW+9WD□BL**	**9RDG□-90FWH+9WHD□**
			

B AC Motors

Reversible Motor 90W(□90mm)

Connection Diagrams

Lead Wire Type	Terminal Box Type
	



Code	Contact Capacity
SW	AC125V 5A min. or AC250V 5A min. (Inductive load)
Ro, Co	Ro=5~200Ω Co=0.1~0.2μF, 200WV (400WV)

* Connect a CR circuit for surge suppression to protect the contact.

1) The direction of motor rotation is as viewed from the shaft end of the motor.
2) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
3) During operation it is available to change the rotating direction by turning the switch to CW or CCW.

120W Reversible Motor 120W(□90mm)

Motor Specification

Model 9RDG*-120F□(-T): Gear Type Shaft 9RDD*-120F(-T): D-Cut Type Shaft 9RDK*-120F(-T): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Starting Torque		Rated Load				Capacitor
									Speed	Current	Torque		
Lead Wire Type	Terminal Box Type	W	V	Hz			kgfcm	N.m	r/min	A	kgfcm	N.m	μF / VAC
9RDGA-120F□	9RDGA-120F□-T	120	1ø110	60	4	30min.	7.60	0.760	1550	2.50	7.60	0.760	30.0 / 250
9RDGD-120F□	9RDGD-120F□-T	120	1ø220	60	4	30min.	6.60	0.660	1600	1.10	7.40	0.740	6.5 / 450
9RDGE-120F□	9RDGE-120F□-T	120	1ø220	50	4	30min.	6.40	0.640	1250	1.00	9.40	0.940	6.5 / 450
			1ø240				7.80	0.780		1.10	10.20	1.020	

1) Enter the phase & voltage code in the place * and enter the model type of attaching gearhead in the box (□) within the motor model name.
2) All models contain a built-in thermal protector.
3) Gear Type Shaft is for attaching gearhead and D-Cut & Key Type Shafts are for using motor only.

Max. Permissible Torque at Output Shaft of Gearhead

60Hz

Motor Model	Gearhead Model	Gear Ratio	2	3	3.6	5	6	7.5	9	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180
		r/min	900	600	500	360	300	240	200	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10
9RDG□ -120FP	9PBK□BH 9PFK□BH	kgfcm	12.3	18.4	22.1	30.7	36.9	46.1	55.3	69.4	83.3	99.9	100.6	125.8	151.0	181.2	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	1.20	1.81	2.17	3.01	3.61	4.51	5.42	6.80	8.16	9.79	9.86	12.33	14.79	17.75	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
9RDG□ -120FH	9HBK□BH 9HFK□BH	kgfcm	–	18.4	22.1	–	36.9	–	55.3	69.4	83.3	99.9	100.6	125.8	151.0	181.2	–	251.6	300.0	300.0	300.0	300.0	300.0	300.0	300.0
		N.m		1.81	2.17		3.61		5.42	6.80	8.16	9.79	9.86	12.33	14.79	17.75		24.66	29.40	29.40	29.40	29.40	29.40	29.40	29.40

Motor Model	Gearhead Model	Gear Ratio	10	12	15	18	25	30	36	50	60
		r/min	180	150	120	100	72	60	50	36	30
9RDG□ -120FW	9WD□BL/ □BR/□BRL	kgfcm	60.7	71.0	85.5	98.6	129.5	146.5	153.1	142.9	122.4
		N.m	5.95	6.96	8.38	9.66	12.69	14.36	15.00	14.00	12.00

Motor Model	Gearhead Model	Gear Ratio	7.5	10	15	20	25	30	40	50	60	80
		r/min	240	180	120	90	72	60	45	36	30	22
9RDG□ -120FWH	9WHD□	kgfcm	46.6	59.9	84.4	106.6	122.1	142.1	174.6	173.5	163.3	132.7
		N.m	4.57	5.87	8.27	10.44	11.97	13.92	17.11	17.00	16.00	13.00

50Hz

Motor Model	Gearhead Model	Gear Ratio	2	3	3.6	5	6	7.5	9	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180
		r/min	750	500	417	300	250	200	167	120	100	83	75	60	50	42	38	30	25	20	17	15	13	10	8
9RDG□ -120FP	9PBK□BH 9PFK□BH	kgfcm	15.6	23.4	28.1	39.0	46.8	58.5	70.2	88.1	105.8	126.9	127.8	159.8	191.8	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	1.53	2.29	2.75	3.82	4.59	5.73	6.88	8.64	10.36	12.44	12.53	15.66	18.79	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
9RDG□ -120FH	9HBK□BH 9HFK□BH	kgfcm	–	23.4	28.1	–	46.8	–	70.2	88.1	105.8	126.9	127.8	159.8	191.8	230.1	–	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
		N.m		2.29	2.75		4.59		6.88	8.64	10.36	12.44	12.53	15.66	18.79	22.55		29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40

Motor Model	Gearhead Model	Gear Ratio	10	12	15	18	25	30	36	50	60
		r/min	150	125	100	83	60	50	42	30	25
9RDG□ -90FW	9WD□BL/ □BR/□BRL	kgfcm	77.1	90.2	108.6	125.2	142.9	163.3	153.1	142.9	122.4
		N.m	7.55	8.84	10.64	12.27	14.00	16.00	15.00	14.00	12.00

Motor Model	Gearhead Model	Gear Ratio	7.5	10	15	20	25	30	40	50	60	80
		r/min	200	150	100	75	60	50	38	30	25	18
9RDG□ -120FWH	9WHD□	kgfcm	59.2	76.1	107.2	135.4	155.1	180.5	183.7	173.5	163.3	132.7
		N.m	5.80	7.46	10.50	13.27	15.20	17.69	18.00	17.00	16.00	13.00

1) Enter the phase & voltage code in the box (□) within the motor model name.
2) Enter the gear ratio in the box (□) within the gearhead model name.
3) A colored background indicates gear shaft rotation in the same direction as the motor shaft; a white background indicates rotation in the opposite direction.
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio. The actual speed is 2~20% less than the displayed value, depending on the size of the load.

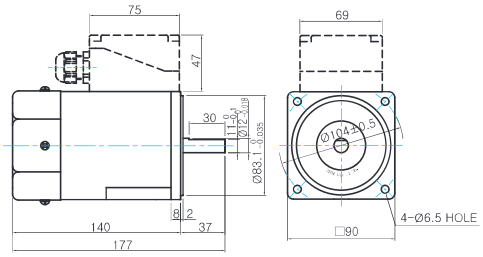
B AC Motors

Reversible Motor 120W(□90mm)

Dimensions

MOTOR ONLY

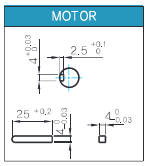
● MOTOR MODEL:
9RDD□-120F(-T) (GENERAL FAN)



● MOTOR OUTPUT SHAFT

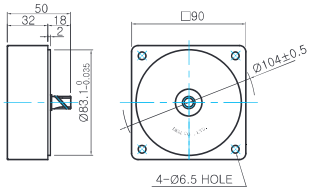
MODEL	SPEC
D-CUT TYPE	
9RDD□-120F	
KEY TYPE	
9RDK□-120F	

● KEY SPEC



INTER-DECIMAL GEARHEAD

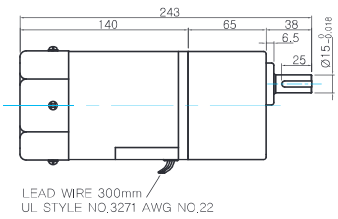
● MODEL: 9XD10M□



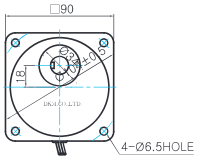
GEARED MOTOR

P TYPE GEARHEAD

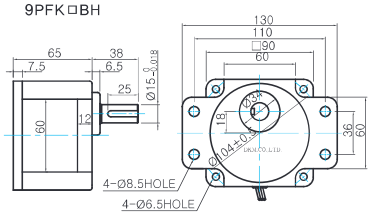
● MOTOR MODEL:
9RDG□-120FP (GENERAL FAN)



● GEARHEAD MODEL:
9PBK□BH



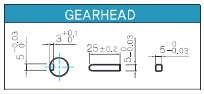
● GEARHEAD MODEL:
9PFK□BH



● GEARHEAD OUTPUT SHAFT

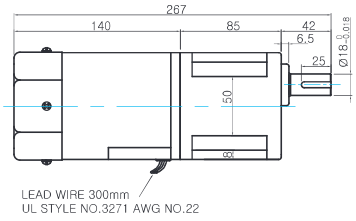
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

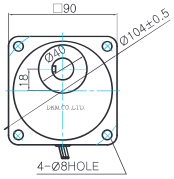


H TYPE GEARHEAD

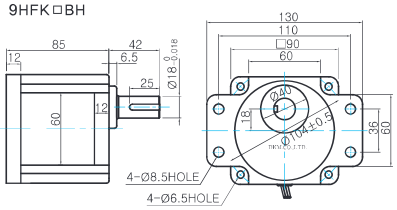
● MOTOR MODEL:
9RDG□-120FH (GENERAL FAN)



● GEARHEAD MODEL:
9HBK□BH



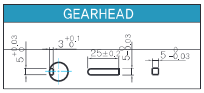
● GEARHEAD MODEL:
9HFK□BH



● GEARHEAD OUTPUT SHAFT

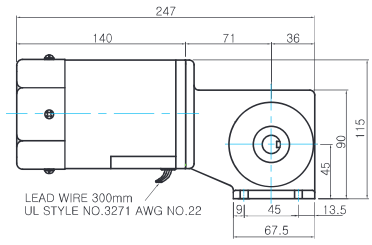
MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC

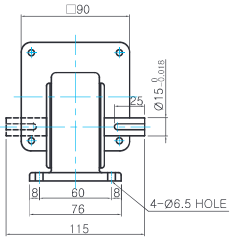


W TYPE GEARHEAD

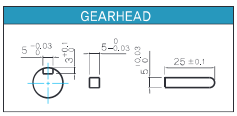
● MOTOR MODEL:
9RDG□-120FW (GENERAL FAN)



● GEARHEAD MODEL:
9WD□BL/BR/BRL

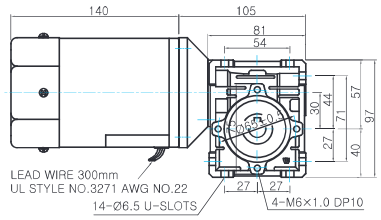


● KEY SPEC

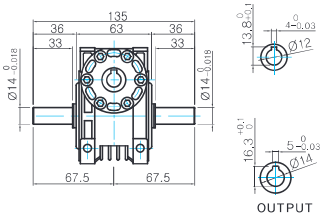


WH TYPE GEARHEAD

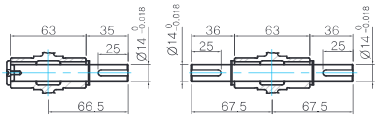
● MOTOR MODEL:
9RDG□–120FWH (GENERAL FAN)



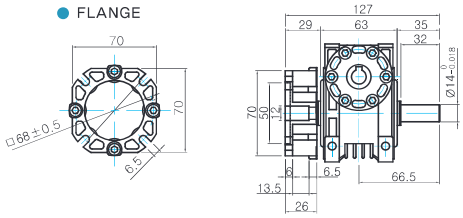
● GEARHEAD MODEL:
9WHD□



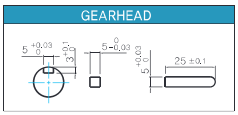
● SHAFT(Unidirectional, Bi–directional)



● FLANGE



● KEY SPEC



WEIGHT

PART		WEIGHT(Kg)
MOTOR		3.0
GEAR HEAD	9PB(F)K2BH ~ 9PB(F)K18BH	1.3
	9PB(F)K20BH ~ 9PB(F)K180BH	1.4
	9HB(F)K3BH ~ 9HB(F)K9BH	1.45
	9HB(F)K12,5BH ~ 9HB(F)K18BH	1.5
	9HB(F)K20BH ~ 9HB(F)K60BH	1.7
	9HB(F)K75BH ~ 9HB(F)K180BH	1.8
	9WD□BL/BR/BRL	1.0
	9WHD□	1.13
	9XD10M□	0.5

* The output flange and shafts are sold separately.

Motor Images

9RDD□–120F	9RDD□–120F-T	9RDG□–120FP+9PBK□BH	9RDG□–120FP+9PFK□BH
			
9RDG□–120FH+9HBK□BH	**9RDG□–120FH+9HFK□BH**	**9RDG□–120FW+9WD□BL**	**9RDG□–120FWH+9WHD□**