DKM MOTOREN TEIL 2

Ott Antriebstechnik
Standardisierte Individualität

HOCHQUALITATIVE AC- UND DC-MOTOREN

MIT STIRNRAD-, SCHNECKEN- ODER HELICROSSGETRIEBE

Ott GmbH & Co. KG
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Clutch & Brake Motor

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Outline of Clutch & Brake

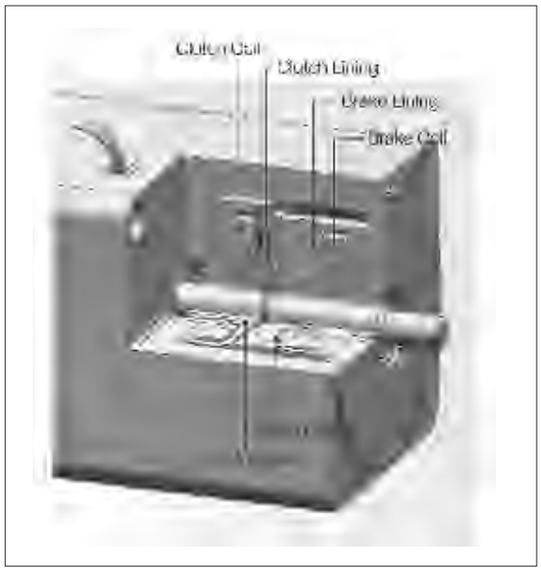
Clutch & Brake Mechanism

An internal clutch & brake mechanism for use with a gearbox is employed in clutch & brake motor. By the combination of a constantly rotating induction motor and a clutch and brake unit, the function of frequent start/stop, positioning, indexing, jogging and incremental feeding are available.

DKM's clutch & brake motor is designed for the quicker response time and higher torque to move the load. To meet high-frequency , starting and stopping applications , DKM uses induction motor for its continuous duty rating . So clutch & brake motor is not suitable for frequent bi-directional starting and stopping motion but suitable for unidirectional movement.
※ Run/Stop Operation is possible less than 100 times per minute.

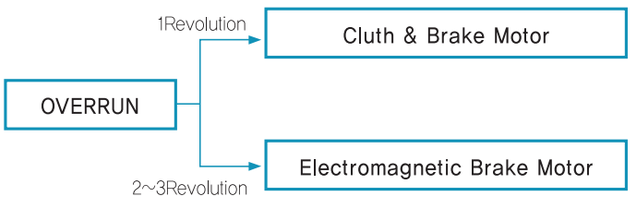
Structure and Mechanism

Output shaft is controlled by the use of the clutch and brake mechanism.



- **Run**
  When the 24 VDC is applied to the clutch coil, the armature of the clutch coil is drawn to the clutch plate. And the rotational force of the motor is transmitted to the output shaft of the gearbox.
- **Stopping and Load Holding**
  By removing the 24 VDC from the clutch coil and, after a certain time lag, applying the 24 VDC to the brake coil, the output shaft will come to a stop.
  During braking the output shaft is released from the motor shaft, so the shaft may be stopped without being influenced by motor inertia. The motor will continue to rotate.

Brake Motor Selecting [Selecting from stopping accuracy]



* The OVERRUN varies depending on the type of motor.

General Specifications

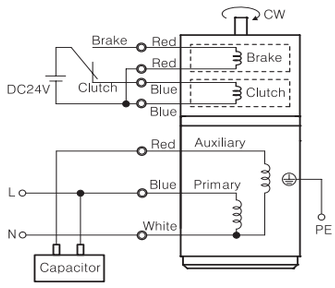
Item	Specification
Insulation Resistance	100MΩ or more when DC500V MEGA is applied between the windings and the frame after rated motor operation under normal ambient temperature and humidity.
Dielectric Strength	Sufficient to withstand 1.5KV at 50Hz and 60Hz applied between the windings and the frame 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 gearbox 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

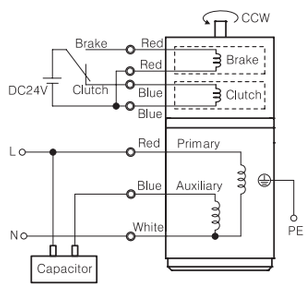
Clutch & Brake Specification

Model		Voltage (V)	Current (A)	Input (W)	Brake Torque (N.m)
□80mm C&B	Clutch	DC24	0.354	8.5	15
	Brake	DC24	0.253	6.1	15
□90mm C&B	Clutch	DC24	0.354	8.5	15
	Brake	DC24	0.253	6.1	15

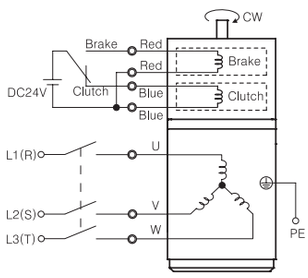
Connection Diagrams

Single Phase





Three Phase



* CCW Direction:
Change any two connections among R, S and T.

INPUT \ LEAD WIRE	U	V	W
3Φ 200V-230V (3, G, J)	WHITE	RED	BLACK
3Φ 380V-400V (4, K)	WHITE	BLUE	BLACK
3Φ 415V-440V (5, L)	WHITE	YELLOW	BLACK

15W Clutch & Brake Motor 15W(□80mm)

Motor Image

8CIDG□-15G+8GBK□BMH

Motor Specification

Model 8CIDG*-15G: Gear Type Shaft Lead Wire Type	Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque kgfcm	Starting Torque N.m	Rated Load Speed r/min	Rated Load Current A	Rated Load Torque kgfcm	Rated Load Torque N.m	Capacitor μF / VAC
8CIDG1(A)-15G	15	1ø110	60	4	Cont.	0.95	0.095	1600	0.54	0.91	0.091	3.5 / 250
8CIDGB-15G	15	1ø100	50	4	Cont.	1.15	0.115	1350	0.52	1.08	0.108	5.0 / 250
			60			1.10	0.110	1600	0.47	0.91	0.091	
8CIDGC-15G	15	1ø 200	50	4	Cont.	1.20	0.120	1350	0.23	1.08	0.108	1.2 / 450
			60			1.15	0.115	1600	0.22	0.91	0.091	
8CIDG2(D)-15G	15	1ø220	60	4	Cont.	1.25	0.125	1600	0.23	0.91	0.091	1.2 / 450
8CIDGE-15G	15	1ø220	50	4	Cont.	1.05	0.105	1300	0.23	1.12	0.112	1.0 / 450
		1ø240				1.27	0.127		0.25	1.12	0.112	
8CIDG3(G)-15G	15	3ø220	50	4	Cont.	7.61	0.761	1350	0.29	1.08	0.108	–
			60			6.15	0.615	1600	0.26	0.91	0.091	
		3ø230	50	4	Cont.	8.25	0.825	1350	0.32	1.08	0.108	
			60			6.72	0.672	1600	0.28	0.91	0.091	
8CIDGJ-15G	15	3ø 200	50	4	Cont.	7.50	0.750	1350	0.28	1.08	0.108	–
			60			5.95	0.595	1600	0.25	0.91	0.091	
		3ø 220	50	4	Cont.	7.61	0.761	1350	0.29	1.08	0.108	
			60			6.15	0.615	1600	0.26	0.91	0.091	
8CIDG4(K)-15G	15	3ø380	50	4	Cont.	5.70	0.570	1350	0.12	1.08	0.108	–
			60			4.53	0.453	1600	0.11	0.91	0.091	
		3ø400	50	4	Cont.	6.26	0.626	1350	0.13	1.08	0.108	
			60			5.03	0.503	1600	0.12	0.91	0.091	
8CIDG5(L)-15G	15	3ø415	50	4	Cont.	6.68	0.668	1350	0.14	1.08	0.108	–
			60			5.40	0.540	1600	0.12	0.91	0.091	
		3ø440	50	4	Cont.	7.39	0.739	1350	0.15	1.08	0.108	
			50			6.02	0.602	1600	0.13	0.91	0.091	

1) Enter the phase & voltage code in the place * within the motor model name.
2) The phase & voltage code A, B, C, D, E, G, J, K, L contain a built-in thermal protector.
3) For using clutch & brake motor, the gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)
4) It is not possible to use an inverter for three phase 380~440V motor. When the inverter is used, the insulation of winding coil becomes hot and may cause damage to the motor.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

Motor Model	Gearbox 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
		r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15
8CIDG*-15G	8GBK□BMH	kgfcm	2.2	2.7	3.7	4.5	5.6	6.7	7.5	9.3	11.2	13.4	13.4	16.8	20.1	24.0	26.7	30.4	36.4	45.5	54.6	60.7	72.9
		N.m	0.22	0.26	0.37	0.44	0.55	0.66	0.73	0.91	1.10	1.31	1.32	1.65	1.97	2.35	2.61	2.98	3.57	4.46	5.36	5.95	7.14

Motor Model	Gearbox Model	Gear Ratio	150	180	200	250	300	360
		r/min	12	10	9	7	6	5
8CIDG*-15G	8GBK□BMH	kgfcm	80.0	80.0	80.0	80.0	80.0	80.0
		N.m	7.84	7.84	7.84	7.84	7.84	7.84

50Hz

Motor Model	Gearbox 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
		r/min	500	417	300	250	200	167	150	120	100	83	75	60	50	42	37.5	30	25	20	17	15	12.5
8CIDG*-15G	8GBK□BMH	kgfcm	2.6	3.2	4.4	5.3	6.6	7.9	8.8	11.0	13.1	15.8	15.8	19.8	23.7	28.4	31.6	35.7	42.9	53.6	64.3	71.4	80.0
		N.m	0.26	0.31	0.43	0.52	0.64	0.77	0.86	1.07	1.29	1.55	1.55	1.94	2.32	2.79	3.10	3.50	4.20	5.25	6.30	7.00	7.84

Motor Model	Gearbox Model	Gear Ratio	150	180	200	250	300	360
		r/min	10	8	7.5	6	5	4
8CIDG*-15G	8GBK□BMH	kgfcm	80.0	80.0	80.0	80.0	80.0	80.0
		N.m	7.84	7.84	7.84	7.84	7.84	7.84

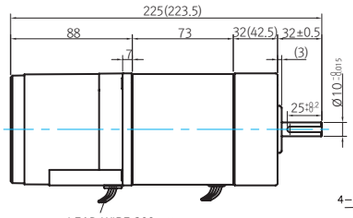
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the 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

GEARED MOTOR

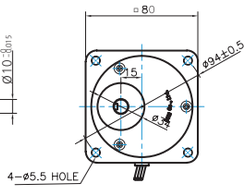
G TYPE GEARBOX

● MOTOR MODEL:
8CIDG□–15G

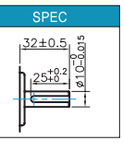


LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.20

● GEARBOX MODEL:
8GBK□BMH



● GEARBOX OUTPUT SHAFT

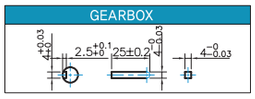
MODEL	SPEC
KEY TYPE	
8GBK□BMH	

● 32(42.5)-Table1

SIZE(mm)	GEAR RATIO
32	8GBK3BMH – 8GBK18BMH
42.5	8GBK20BMH – 8GBK360BMH

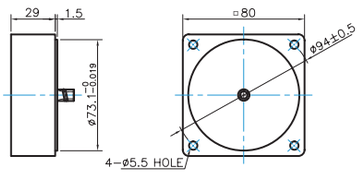
● KEY SPEC

GEARBOX



INTER-DECIMAL GEARBOX

● MODEL:
8XD10□□



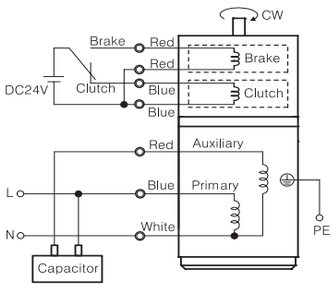
WEIGHT

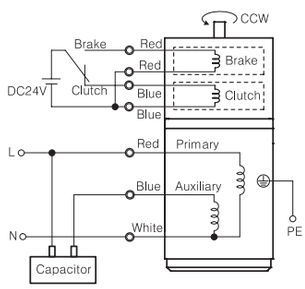
PART		WEIGHT(kg)
MOTOR		2.73
GEAR BOX	8GBK3BMH – 8GBK18BMH	0.56
	8GBK20BMH – 8GBK40BMH	0.65
	8GBK50BMH – 8GBK360BMH	0.72
	8XD10○○	0.45

*The output flange and shaft are sold separately.

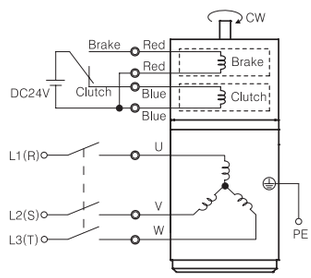
Connection Diagrams

Single Phase





Three Phase



* CCW Direction:
Change any two connections among R, S and T.

INPUT \ LEAD WIRE	U	V	W
3Φ 200V~230V (3, G, J)	WHITE	RED	BLACK
3Φ 380V~400V (4, K)	WHITE	BLUE	BLACK
3Φ 415V~440V (5, L)	WHITE	YELLOW	BLACK

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) Change the direction of single phase motor rotation only after bringing the motor to a stop. If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction after some delay.

25W Clutch & Brake Motor 25W(□ 80mm)

Motor Image

8CIDG□-25G+8GBK□BMH

Motor Specification

Model 8CIDG*-25G: Gear Type Shaf Lead Wire Type	Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque kgfcm	Starting Torque N.m	Rated Load Speed r/min	Rated Load Current A	Rated Load Torque kgfcm	Rated Load Torque N.m	Capacitor μF / VAC
8CIDG1(A)-25G	25	1ø110	60	4	Cont.	1.63	0.163	1600	0.55	1.52	0.152	6.0 / 250
8CIDGB-25G	25	1ø 100	50	4	Cont.	1.45	0.145	1250	0.62	1.95	0.195	6.0 / 250
			60			1.35	0.135	1550	0.55	1.57	0.157	
8CIDGC-25G	25	1ø 200	50	4	Cont.	1.45	0.145	1250	0.26	1.95	0.195	1.5 / 450
			60			1.40	0.140	1550	0.25	1.57	0.157	
8CIDG2(D)-25G	25	1ø220	60	4	Cont.	1.59	0.159	1550	0.27	1.57	0.157	1.5 / 450
8CIDGE-25G	25	1ø220	50	4	Cont.	1.57	0.157	1250	0.23	1.95	0.195	1.5 / 450
		1ø240				1.87	0.187		0.25	1.95	0.195	
8CIDG3(G)-25G	25	3ø 220	50	4	Cont.	7.61	0.761	1350	0.29	1.80	0.180	–
			60			6.15	0.615	1600	0.26	1.52	0.152	
		3ø 230	50	4	Cont.	8.25	0.825	1350	0.32	1.80	0.180	
			60			6.72	0.672	1600	0.28	1.52	0.152	
8CIDGJ-25G	25	3ø 200	50	4	Cont.	7.50	0.750	1300	0.30	1.87	0.187	–
			60			5.95	0.595	1550	0.27	1.57	0.157	
		3ø 220	50	4	Cont.	7.61	0.761	1350	0.29	1.80	0.180	
			60			6.15	0.615	1600	0.26	1.52	0.152	
8CIDG4(K)-25G	25	3ø380	50	4	Cont.	5.70	0.570	1300	0.13	1.87	0.187	–
			60			4.53	0.453	1550	0.12	1.57	0.157	
		3ø400	50	4	Cont.	6.26	0.626	1300	0.14	1.87	0.187	
			60			5.03	0.503	1550	0.13	1.57	0.157	
8CIDG5(L)-25G	25	3ø415	50	4	Cont.	6.68	0.668	1300	0.15	1.87	0.187	–
			60			5.40	0.540	1550	0.13	1.57	0.157	
		3ø440	50	4	Cont.	7.39	0.739	1300	0.16	1.87	0.187	
			60			6.02	0.602	1550	0.14	1.57	0.157	

1) Enter the phase & voltage code in the place * within the motor model name.
2) The phase & voltage code A, B, C, D, E, G, J, K, L contain a built-in thermal protector.
3) For using clutch & brake motor, the gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)
4) It is not possible to use an inverter for three phase 380~440V motor. When the inverter is used, the insulation of winding coil becomes hot and may cause damage to the motor.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

Motor Model	Gearbox 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
		r/min	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15
8CIDG*-25G	8GBK□BMH	kgfcm	3.7	4.4	6.2	7.4	9.2	11.1	12.3	15.4	18.5	22.2	22.2	27.8	33.3	40.0	44.4	50.2	60.3	80.0	80.0	80.0	80.0
		N.m	0.36	0.43	0.60	0.72	0.91	1.09	1.21	1.51	1.81	2.17	2.18	2.72	3.27	3.92	4.35	4.92	5.91	7.84	7.84	7.84	7.84

Motor Model	Gearbox Model	Gear Ratio	150	180	200	250	300	360
		r/min	12	10	9	7	6	5
8CIDG*-25G	8GBK□BMH	kgfcm	80.0	80.0	80.0	80.0	80.0	80.0
		N.m	7.84	7.84	7.84	7.84	7.84	7.84

50Hz

Motor Model	Gearbox 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
		r/min	500	417	300	250	200	167	150	120	100	83	75	60	50	42	37.5	30	25	20	17	15	12.5
8CIDG*-25G	8GBK□BMH	kgfcm	4.4	5.3	7.3	8.8	11.0	13.1	14.6	18.3	21.9	26.3	26.3	32.9	39.5	47.4	52.7	59.5	80.0	80.0	80.0	80.0	80.0
		N.m	0.43	0.52	0.72	0.86	1.07	1.29	1.43	1.79	2.15	2.58	2.58	3.23	3.87	4.65	5.16	5.83	7.84	7.84	7.84	7.84	7.84

Motor Model	Gearbox Model	Gear Ratio	150	180	200	250	300	360
		r/min	10	8	7.5	6	5	4
8CIDG*-25G	8GBK□BMH	kgfcm	80.0	80.0	80.0	80.0	80.0	80.0
		N.m	7.84	7.84	7.84	7.84	7.84	7.84

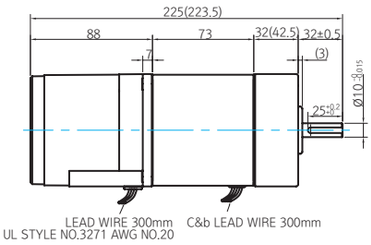
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the 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

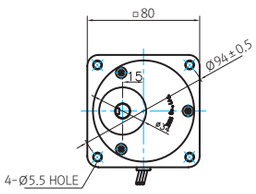
GEARED MOTOR

G TYPE GEARBOX

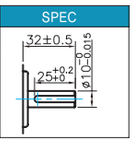
- MOTOR MODEL:
  8CIDG□-25G



- GEARBOX MODEL:
  8GBK□BMH



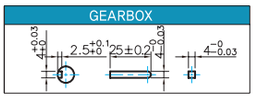
- GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
8GBK□BMH	

- 32(42.5)-Table1

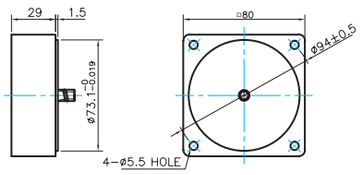
SIZE(mm)	GEAR RATIO
32	8GBK3BMH – 8GBK18BMH
42.5	8GBK20BMH – 8GBK360BMH

- KEY SPEC

GEARBOX


INTER-DECIMAL GEARBOX

- MODEL:
  8XD10□□



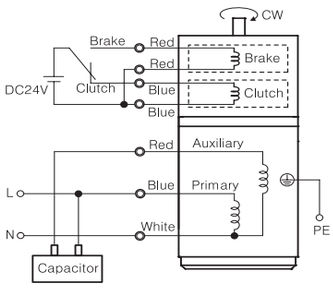
WEIGHT

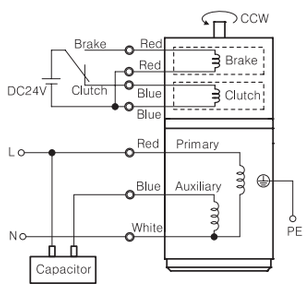
PART		WEIGHT(kg)
MOTOR		2.73
GEAR BOX	8GBK3BMH - 8GBK18BMH	0.56
	8GBK20BMH - 8GBK40BMH	0.65
	8GBK50BMH - 8GBK360BMH	0.72
	8XD10○○	0.45

*The output flange and shaft are sold separately.

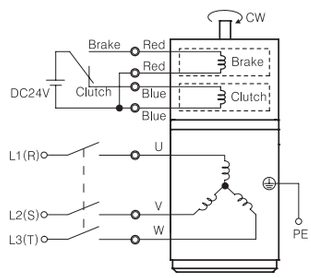
Connection Diagrams

Single Phase





Three Phase



* CCW Direction:
Change any two connections among R, S and T.

INPUT \ LEAD WIRE	U	V	W
3Φ 200V~230V (3, G, J)	WHITE	RED	BLACK
3Φ 380V~400V (4, K)	WHITE	BLUE	BLACK
3Φ 415V~440V (5, L)	WHITE	YELLOW	BLACK

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) Change the direction of single phase motor rotation only after bringing the motor to a stop. If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction after some delay.

Clutch & Brake Motor 40W (□90mm)

40W Clutch & Brake Motor 40W(□90mm)

Motor Image

9CIDG□-40G+9GBK□BMH	9CIDG□-40P+9PBK□BH

Motor Specification

Model 9CIDG*-40G: Gear Type Shaft Lead Wire Type	Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque kgfcm	Starting Torque N.m	Rated Load Speed r/min	Rated Load Current A	Rated Load Torque kgfcm	Rated Load Torque N.m	Capacitor μF / VAC
9CIDG1(A)-40G	40	1ø110	60	4	Cont.	2.60	0.260	1600	0.80	2.44	0.244	10.0 / 250
9CIDGB-40G	40	1ø 100	50	4	Cont.	2.20	0.220	1250	0.89	3.12	0.312	10.0 / 250
			60			2.15	0.215	1550	0.81	2.52	0.252	
9CIDGC-40G	40	1ø 200	50	4	Cont.	2.90	0.299	1300	0.49	3.00	0.300	3.0 / 450
			60			2.75	0.275	1600	0.43	2.44	0.244	
9CIDG2(D)-40G	40	1ø220	60	4	Cont.	2.60	0.260	1600	0.45	2.44	0.244	2.5 / 450
9CIDGE-40G	40	1ø220	50	4	Cont.	2.10	0.210	1300	0.33	3.00	0.300	2.0 / 450
		1ø240				2.60	0.260		0.36	3.00	0.300	
9CIDG3(G)-40G	40	3ø220	50	4	Cont.	9.90	0.990	1350	0.33	2.89	0.289	-
			60			7.90	0.790	1600	0.31	2.44	0.244	
		3ø230	50	4	Cont.	10.80	1.080	1350	0.35	2.89	0.289	
			60			8.50	0.850	1600	0.33	2.44	0.244	
9CIDGJ-40G	40	3ø200	50	4	Cont.	9.60	0.960	1300	0.34	3.00	0.300	-
			60			7.40	0.740	1550	0.31	2.52	0.252	
		3ø220	50	4	Cont.	9.90	0.990	1350	0.33	2.89	0.289	
			60			7.90	0.790	1600	0.31	2.44	0.244	
9CIDG4(K)-40G	40	3ø380	50	4	Cont.	10.20	1.020	1350	0.19	2.89	0.289	-
			60			8.00	0.800	1600	0.18	2.44	0.244	
		3ø400	50	4	Cont.	11.10	1.110	1350	0.20	2.89	0.289	
			60			8.80	0.880	1600	0.19	2.44	0.244	
9CIDG5(L)-40G	40	3ø415	50	4	Cont.	10.00	1.000	1350	0.17	2.89	0.289	-
			60			8.00	0.800	1600	0.16	2.44	0.244	
		3ø440	50	4	Cont.	11.10	1.110	1350	0.18	2.89	0.289	
			60			8.90	0.890	1600	0.17	2.44	0.244	

1) Enter the phase & voltage code in the place * within the motor model name. 2) The phase & voltage code A, B, C, D, E, G, J, K, L contain a built-in thermal protector.
3) For using clutch & brake motor, the gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)
4) It is not possible to use an inverter for three phase 380~440V motor. When the inverter is used, the insulation of winding coil becomes hot and may cause damage to the motor.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

Motor Model	Gearbox Model	Gear Ratio	2	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
		r/min	900	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
9CIDG*-40G	9GBK□BMH	kgfcm	3.9	5.9	7.1	9.9	11.8	14.8	17.8	19.7	24.7	29.6	35.5	35.6	44.4	53.3	64.0	71.1	80.4	96.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		N.m	0.39	0.58	0.70	0.97	1.16	1.45	1.74	1.93	2.42	2.90	3.48	3.48	4.35	5.23	6.27	6.97	7.87	9.45	9.80	9.80	9.80	9.80	9.80	9.80	9.80

Motor Model	Gearbox Model	Gear Ratio	2	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
		r/min	900	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30	24	20	18	15	12	10	9
9CIDG*-40P	9PBK□BH 9PFK□BH	kgfcm	3.9	5.9	7.1	9.9	11.8	14.8	17.8	19.7	22.2	26.7	32.0	35.6	40.2	48.2	57.9	64.3	80.4	96.4	107.7	129.3	143.7	172.4	200.0	200.0	200.0
		N.m	0.39	0.58	0.70	0.97	1.16	1.45	1.74	1.93	2.18	2.61	3.14	3.48	3.94	4.72	5.67	6.30	7.87	9.45	10.56	12.67	14.08	16.90	19.60	19.60	19.60

50Hz

Motor Model	Gearbox Model	Gear Ratio	2	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
		r/min	750	500	417	300	250	200	167	150	120	100	83	75	60	50	42	38	30	25	20	17	15	13	10	8	7
9CIDG*-40G	9GBK□BMH	kgfcm	4.7	7.0	8.4	11.7	14.0	17.5	21.0	23.4	29.2	35.1	42.1	42.1	52.7	63.2	75.8	84.3	95.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		N.m	0.46	0.69	0.82	1.15	1.37	1.72	2.06	2.29	2.86	3.44	4.12	4.13	5.16	6.19	7.43	8.26	9.33	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80

Motor Model	Gearbox Model	Gear Ratio	2	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
		r/min	750	500	417	300	250	200	167	150	120	100	83	75	60	50	42	37.5	30	25	20	17	15	12.5	10	8	7.5
9CIDG*-40P	9PBK□BH 9PFK□BH	kgfcm	4.7	7.0	8.4	11.7	14.0	17.5	21.0	23.4	26.3	31.6	37.9	42.1	47.6	57.1	68.6	76.2	95.2	114.3	127.7	153.2	170.3	200.0	200.0	200.0	200.0
		N.m	0.46	0.69	0.82	1.15	1.37	1.72	2.06	2.29	2.58	3.10	3.72	4.13	4.67	5.60	6.72	7.47	9.33	11.20	12.51	15.02	16.69	19.60	19.60	19.60	19.60

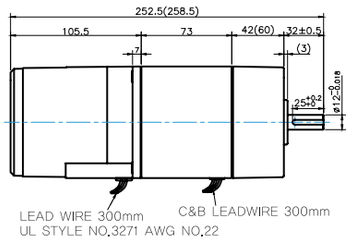
1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the gear ratio in the place of □ within the gearbox model name. 3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the 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

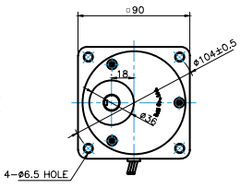
GEARED MOTOR

G TYPE GEARBOX

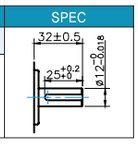
● MOTOR MODEL:
9CIDG□-40G



● GEARBOX MODEL:
9GBK□BMH

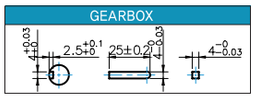


● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9GBK□BMH	

● KEY SPEC

GEARBOX

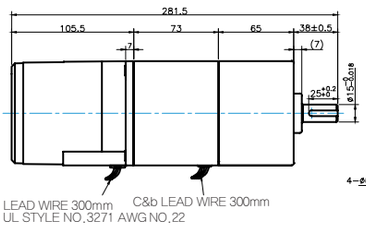


● 42(60)-Table1

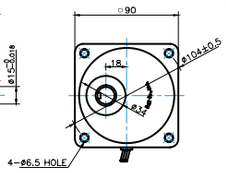
SIZE(mm)	GEAR RATIO
42	9GBK2BMH – 9GBK18BMH
60	9GBK20BMH – 9GBK200BMH

P TYPE GEARBOX

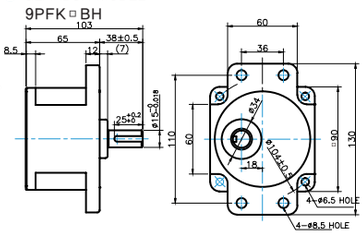
● MOTOR MODEL:
9CIDG□-40P



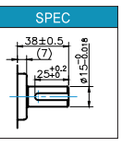
● GEARBOX MODEL:
9PBK□BH



● GEARBOX MODEL:
9PFK□BH

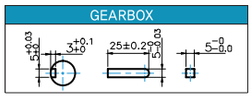


● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

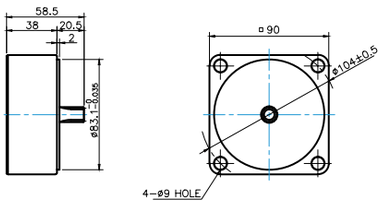
● KEY SPEC

GEARBOX



INTER-DECIMAL GEARBOX

● MODEL:
9XD10□□



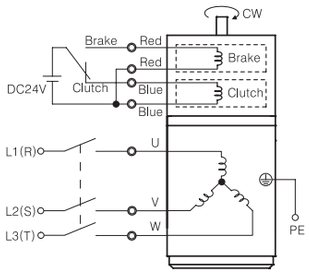
WEIGHT

PART		WEIGHT(kg)
MOTOR		3.80
GEAR BOX	9GBK2BMH - 9GBK18BMH	0.78
	9GBK20BMH - 9GBK40BMH	1.10
	9GBK50BMH - 9GBK200BMH	1.20
	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Connection Diagrams

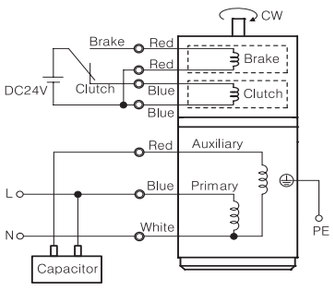
Three Phase

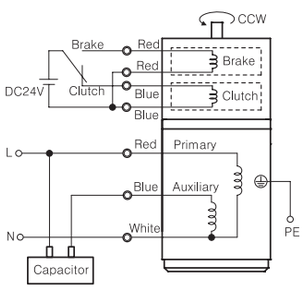


* CCW Direction:
Change any two connections among R, S and T.

INPUT \ LEAD WIRE	U	V	W
3Φ 200V-230V (3, G, J)	WHITE	RED	BLACK
3Φ 380V-400V (4, K)	WHITE	BLUE	BLACK
3Φ 415V-440V (5, L)	WHITE	YELLOW	BLACK

Single Phase





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) Change the direction of single phase motor rotation only after bringing the motor to a stop.
If an attempt is made to change the direction of rotation while the motor is rotating,
the motor may ignore the reversing command or change its direction after some delay.

60W Clutch & Brake Motor 60W(□ 90mm)

Motor Images

9CIDG□-60F2P+9PBK□BH	9CIDG□-60F2P+9PFK□BH

Motor Specification

Model 9CIDG*-60F2P: Gear Type Shaft Lead Wire Type	Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque kgfcm	 N.m	Rated Load Speed r/min	 Current A	 Torque kgfcm	 N.m	Capacitor μF / VAC
9CIDG1(A)-60F2P	60	1ø110	60	4	Cont.	4.30	0.430	1600	1.30	3.65	0.365	16.0 / 250
9CIDGB-60F2P	60	1ø 100	50	4	Cont.	4.80	0.480	1300	1.40	4.50	0.450	20.0 / 250
			60			4.60	0.460	1600	1.40	3.65	0.365	
9CIDGC-60F2P	60	1ø 200	50	4	Cont.	4.70	0.470	1300	0.71	4.50	0.450	5.0 / 450
			60			4.50	0.450	1600	0.69	3.65	0.365	
9CIDG2(D)-60F2P	60	1ø220	60	4	Cont.	4.20	0.420	1600	0.68	3.65	0.365	4.0 / 450
9CIDGE-60F2P	60	1ø220	50	4	Cont.	3.90	0.390	1300	0.48	4.50	0.450	3.5 / 450
		1ø240				4.80	0.480		0.54	4.50	0.450	
9CIDG3(G)-60F2P	60	3ø220	50	4	Cont.	17.20	1.720	1350	0.59	4.33	0.433	-
			60			13.80	1.380	1600	0.53	3.65	0.365	
		3ø230	50	4	Cont.	18.80	1.880	1350	0.62	4.33	0.433	
			60			15.00	1.500	1600	0.56	3.65	0.365	
9CIDGJ-60F2P	60	3ø 200	50	4	Cont.	16.50	1.650	1300	0.57	4.50	0.450	-
			60			13.00	1.300	1550	0.52	3.77	0.377	
		3ø 220	50	4	Cont.	17.20	1.720	1350	0.59	4.33	0.433	
			60			13.80	1.380	1600	0.53	3.65	0.365	
9CIDG4(K)-60F2P	60	3ø380	50	4	Cont.	16.70	1.670	1350	0.31	4.33	0.433	-
			60			13.40	1.340	1600	0.28	3.65	0.365	
		3ø400	50	4	Cont.	18.30	1.830	1350	0.34	4.33	0.433	
			60			14.70	1.470	1600	0.30	3.65	0.365	
9CIDG5(L)-60F2P	60	3ø415	50	4	Cont.	16.70	1.670	1350	0.29	4.33	0.433	-
			60			13.40	1.340	1600	0.26	3.65	0.365	
		3ø440	50	4	Cont.	18.50	1.850	1350	0.31	4.33	0.433	
			60			15.00	1.500	1600	0.28	3.65	0.365	

1) Enter the phase & voltage code in the place * within the motor model name.
2) The phase & voltage code A, B, C, D, E, G, J, K, L contain a built-in thermal protector.
3) For using clutch & brake motor, the gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)
4) It is not possible to use an inverter for three phase 380~440V motor. When the inverter is used, the insulation of winding coil becomes hot and may cause damage to the motor.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

Motor Model	Gearbox Model	Gear Ratio r/min	2 900	3 600	3.6 500	5 360	6 300	7.5 240	9 200	10 180	12.5 144	15 120	18 100	20 90	25 72	30 60	36 50	40 45	50 36	60 30
9CIDG*-60F2P	9PBK□BH 9PFK□BH	kgfcm	5.9	8.9	10.7	14.8	17.8	22.2	26.6	29.6	33.3	40.0	48.0	53.3	60.3	72.3	86.8	96.4	120.5	144.6
		N.m	0.58	0.87	1.04	1.45	1.74	2.17	2.61	2.90	3.27	3.92	4.70	5.23	5.91	7.09	8.50	9.45	11.81	14.17

Motor Model	Gearbox Model	Gear Ratio r/min	75 24	90 20	100 18	120 15	150 12	180 10	200 9
9CIDG*-60F2P	9PBK□BH 9PFK□BH	kgfcm	161.6	193.9	200.0	200.0	200.0	200.0	200.0
		N.m	15.84	19.01	19.60	19.60	19.60	19.60	19.60

50Hz

Motor Model	Gearbox Model	Gear Ratio r/min	2 750	3 500	3.6 417	5 300	6 250	7.5 200	9 167	10 150	12.5 120	15 100	18 83	20 75	25 60	30 50	36 42	40 37.5	50 30	60 25
9CIDG*-60F2P	9PBK□BH 9PFK□BH	kgfcm	7.0	10.5	12.6	17.5	21.0	26.3	31.6	35.1	39.5	47.4	56.9	63.2	71.4	85.7	102.9	114.3	142.9	171.4
		N.m	0.69	1.03	1.24	1.72	2.06	2.58	3.09	3.44	3.87	4.65	5.57	6.19	7.00	8.40	10.08	11.20	14.00	16.80

Motor Model	Gearbox Model	Gear Ratio r/min	75 20	90 17	100 15	120 12.5	150 10	180 8	200 7.5
9CIDG*-60F2P	9PBK□BH 9PFK□BH	kgfcm	191.6	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	18.77	19.60	19.60	19.60	19.60	19.60	19.60

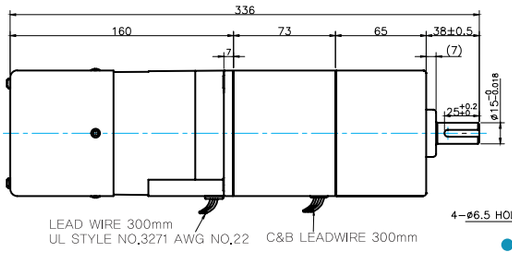
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft; a white background indicates the rotation in the opposite 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

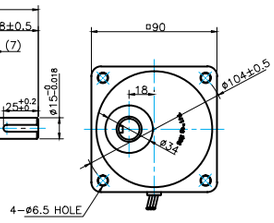
GEARED MOTOR

P TYPE GEARBOX

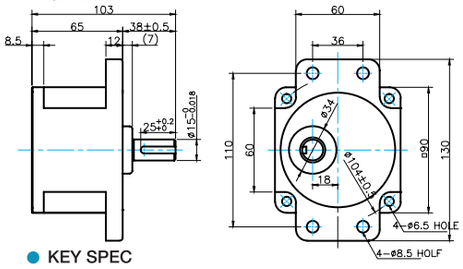
● MOTOR MODEL:
9CIDG□-60F2P (POWERFUL FAN)



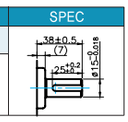
● GEARBOX MODEL:
9PBK□BH



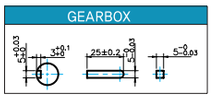
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

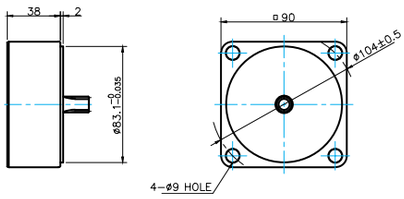
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

GEARBOX


INTER-DECIMAL GEARBOX

● MODEL:
9XD10□□



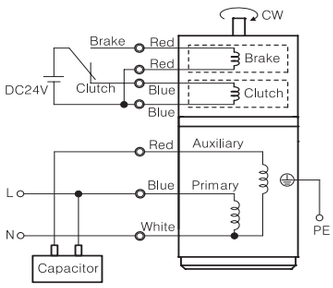
WEIGHT

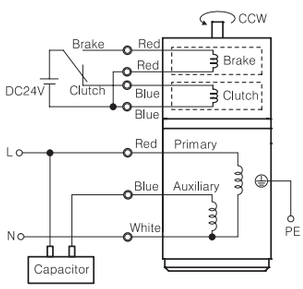
PART		WEIGHT(kg)
MOTOR		4.40
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9XD10○○	0.60

*The output flange and shaft are sold separately.

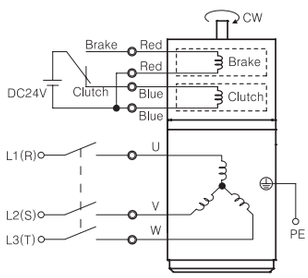
Connection Diagrams

Single Phase





Three Phase



* CCW Direction:
Change any two connections among R, S and T.

INPUT \ LEAD WIRE	U	V	W
3Φ 200V~230V (3, G, J)	WHITE	RED	BLACK
3Φ 380V~400V (4, K)	WHITE	BLUE	BLACK
3Φ 415V~440V (5, L)	WHITE	YELLOW	BLACK

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) Change the direction of single phase motor rotation only after bringing the motor to a stop. If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction after some delay.

90W Clutch & Brake Motor 90W(□ 90mm)

Motor Images

9CIDG□-90F2P+9PBK□BH	9CIDG□-90F2P+9PFK□BH

Motor Specification

Model 9CIDG*-90F2P: Gear Type Shaft Lead Wire Type	Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque kgfcm	Starting Torque N.m	Rated Load Speed r/min	Rated Load Current A	Rated Load Torque kgfcm	Rated Load Torque N.m	Capacitor μF / VAC
9CIDG1(A)-90F2P	90	1ø110	60	4	Cont.	5.00	0.500	1600	1.80	5.48	0.548	20.0 / 250
9CIDGB-90F2P	90	1ø 100	50	4	Cont.	5.90	0.590	1300	1.80	6.74	0.674	25.0 / 250
			60			5.40	0.540	1600	1.85	5.48	0.548	
9CIDGC-90F2P	90	1ø 200	50	4	Cont.	5.70	0.570	1300	1.10	6.74	0.674	6.0 / 450
			60			5.20	0.520	1600	0.94	5.48	0.548	
9CIDG2(D)-90F2P	90	1ø220	60	4	Cont.	5.00	0.500	1600	1.00	5.48	0.548	5.0 / 450
9CIDGE-90F2P	90	1ø220	50	4	Cont.	5.30	0.530	1300	0.70	6.74	0.674	5.0 / 450
		1ø240				6.30	0.630		0.76	6.74	0.674	
9CIDG3(G)-90F2P	90	3ø220	50	4	Cont.	20.50	2.050	1350	0.65	6.49	0.649	–
			60			16.20	1.620	1600	0.60	5.48	0.548	
		3ø230	50	4	Cont.	22.00	2.200	1350	0.68	6.49	0.649	
			60			17.60	1.760	1600	0.63	5.48	0.548	
9CIDGJ-90F2P	90	3ø200	50	4	Cont.	18.50	1.850	1300	0.65	6.74	0.674	–
			60			14.00	1.400	1550	0.60	5.66	0.566	
		3ø220	50	4	Cont.	20.50	2.050	1350	0.65	6.49	0.649	
			60			16.20	1.620	1600	0.60	5.48	0.548	
9CIDG4(K)-90F2P	90	3ø380	50	4	Cont.	20.00	2.000	1350	0.35	6.49	0.649	–
			60			15.70	1.570	1600	0.33	5.48	0.548	
		3ø400	50	4	Cont.	21.80	2.180	1350	0.37	6.49	0.649	
			60			17.30	1.730	1600	0.35	5.48	0.548	
9CIDG5(L)-90F2P	90	3ø415	50	4	Cont.	20.50	2.050	1350	0.33	6.49	0.649	–
			60			16.20	1.620	1600	0.31	5.48	0.548	
		3ø440	50	4	Cont.	22.70	2.270	1350	0.36	6.49	0.649	
			60			18.10	1.810	1600	0.33	5.48	0.548	

1) Enter the phase & voltage code in the place * within the motor model name.
2) The phase & voltage code A, B, C, D, E, G, J, K, L contain a built-in thermal protector.
3) For using clutch & brake motor, the gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)
4) It is not possible to use an inverter for three phase 380~440V motor. When the inverter is used, the insulation of winding coil becomes hot and may cause damage to the motor.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

Motor Model	Gearbox Model	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60
		r/min	900	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30
9CIDG*-90F2P	9PBK□BH 9PFK□BH	kgfcm	8.9	13.3	16.0	22.2	26.6	33.3	39.9	44.4	50.0	60.0	72.0	80.0	90.4	108.5	130.2	144.6	180.8	200.0
		N.m	0.87	1.30	1.57	2.17	2.61	3.26	3.91	4.35	4.90	5.88	7.06	7.84	8.86	10.63	12.76	14.17	17.72	19.60

Motor Model	Gearbox Model	Gear Ratio	75	90	100	120	150	180	200
		r/min	24	20	18	15	12	10	9
9CIDG*-90F2P	9PBK□BH 9PFK□BH	kgfcm	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	19.60	19.60	19.60	19.60	19.60	19.60	19.60

50Hz

Motor Model	Gearbox Model	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60
		r/min	750	500	417	300	250	200	167	150	120	100	83	75	60	50	42	37.5	30	25
9CIDG*-90F2P	9PBK□BH 9PFK□BH	kgfcm	10.5	15.8	18.9	26.3	31.6	39.4	47.3	52.6	59.3	71.1	85.3	94.8	107.1	128.6	154.3	171.4	200.0	200.0
		N.m	1.03	1.55	1.86	2.58	3.09	3.87	4.64	5.15	5.81	6.97	8.36	9.29	10.50	12.60	15.12	16.80	19.60	19.60

Motor Model	Gearbox Model	Gear Ratio	75	90	100	120	150	180	200
		r/min	20	17	15	12.5	10	8	7.5
9CIDG*-90F2P	9PBK□BH 9PFK□BH	kgfcm	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	19.60	19.60	19.60	19.60	19.60	19.60	19.60

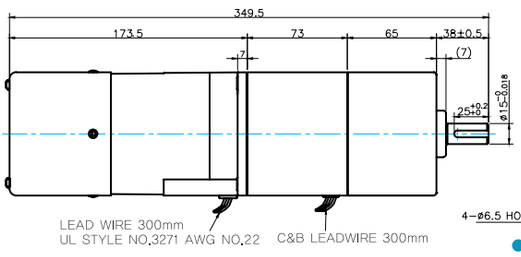
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the 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

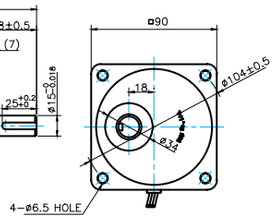
GEARED MOTOR

P TYPE GEARBOX

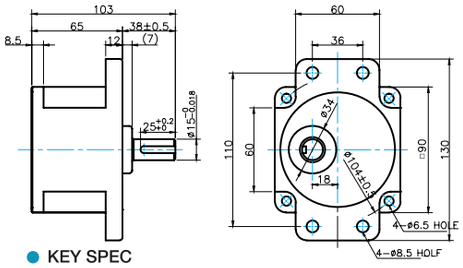
● MOTOR MODEL:
9CIDG□-90F2P



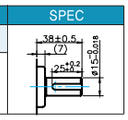
● GEARBOX MODEL:
9PBK□BH



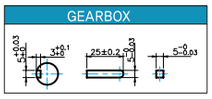
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

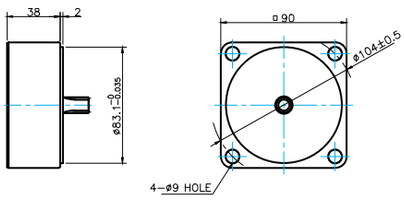
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

GEARBOX


INTER-DECIMAL GEARBOX

● MODEL:
9XD10□□



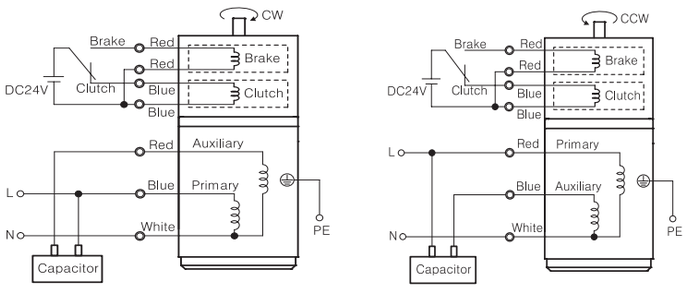
WEIGHT

PART		WEIGHT(kg)
MOTOR		4.75
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9XD10○○	0.60

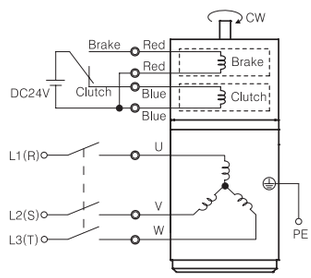
*The output flange and shaft are sold separately.

Connection Diagrams

Single Phase



Three Phase



* CCW Direction:
Change any two connections among R, S and T.

INPUT \ LEAD WIRE	U	V	W
3Φ 200V~230V (3, G, J)	WHITE	RED	BLACK
3Φ 380V~400V (4, K)	WHITE	BLUE	BLACK
3Φ 415V~440V (5, L)	WHITE	YELLOW	BLACK

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) Change the direction of single phase motor rotation only after bringing the motor to a stop. If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction after some delay.

120W Clutch & Brake Motor 120W(□90mm)

Motor Images

9CIDG□-120F2P+9PBK□BH	9CIDG□-120F2P+9PFK□BH

Motor Specification

Model 9IDG*-120F2P: Gear Type Shaft Lead Wire Type	Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque kgfcm	Starting Torque N.m	Rated Load Speed r/min	Rated Load Current A	Rated Load Torque kgfcm	Rated Load Torque N.m	Capacitor μF / VAC
9CIDG1(A)-120F2P	120	1ø110	60	4	Cont.	6.50	0.650	1600	2.00	7.31	0.731	25.0 / 250
9CIDG2(D)-120F2P	120	1ø220	60	4	Cont.	6.20	0.620	1600	1.04	7.31	0.731	6.0 / 450
9CIDGE-120F2P	120	1ø220	50	4	Cont.	6.40	0.640	1250	0.90	9.35	0.935	6.0 / 450
		1ø240				7.50	0.750		1.00	9.35	0.935	
9CIDG3(G)-120F2P	120	3ø220	50	4	Cont.	24.40	2.440	1300	0.88	8.99	0.899	–
			60			20.00	2.000	1600	0.71	7.31	0.731	
		3ø230	50	4	Cont.	27.00	2.700	1350	0.86	8.66	0.866	
			60			21.70	2.170	1600	0.76	7.31	0.731	
9CIDG4(K)-120F2P	120	3ø380	50	4	Cont.	24.30	2.430	1300	0.50	8.99	0.899	–
			60			19.90	1.990	1600	0.41	7.31	0.731	
		3ø400	50	4	Cont.	27.10	2.710	1350	0.49	8.66	0.866	
			60			21.90	2.190	1600	0.43	7.31	0.731	
9CIDG5(L)-120F2P	120	3ø415	50	4	Cont.	24.30	2.430	1300	0.47	8.99	0.899	–
			60			19.90	1.990	1600	0.37	7.31	0.731	
		3ø440	50	4	Cont.	27.50	2.750	1350	0.47	8.66	0.866	
			60			22.20	2.220	1600	0.40	7.31	0.731	

1) Enter the phase & voltage code in the place * within the motor model name.
2) The phase & voltage code A, D, E, G, K, L contain a built-in thermal protector.
3) For using clutch & brake motor, the gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)
4) It is not possible to use an inverter for three phase 380~440V motor. When the inverter is used, the insulation of winding coil becomes hot and may cause damage to the motor.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

Motor Model	Gearbox Model	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60
		r/min	900	600	500	360	300	240	200	180	144	120	100	90	72	60	50	45	36	30
9CIDG□-120F2P	9PBK□BH 9PFK□BH	kgfcm	11.8	17.8	21.3	29.6	35.5	44.4	53.3	59.2	66.7	80.0	96.0	106.7	120.5	144.6	173.6	192.9	200.0	200.0
		N.m	1.16	1.74	2.09	2.90	3.48	4.35	5.22	5.80	6.53	7.84	9.41	10.45	11.81	14.17	17.01	18.90	19.60	19.60

Motor Model	Gearbox Model	Gear Ratio	75	90	100	120	150	180	200
		r/min	24	20	18	15	12	10	9
9CIDG□-120F2P	9PBK□BH 9PFK□BH	kgfcm	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	19.60	19.60	19.60	19.60	19.60	19.60	19.60

50Hz

Motor Model	Gearbox Model	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60
		r/min	750	500	417	300	250	200	167	150	120	100	83	75	60	50	42	37.5	30	25
9CIDG□-120F2P	9PBK□BH 9PFK□BH	kgfcm	14.0	21.0	25.2	35.1	42.1	52.6	63.1	70.1	79.0	94.8	113.8	126.4	142.9	171.4	200.0	200.0	200.0	200.0
		N.m	1.37	2.06	2.47	3.44	4.12	5.15	6.19	6.87	7.74	9.29	11.15	12.39	14.00	16.80	19.60	19.60	19.60	19.60

Motor Model	Gearbox Model	Gear Ratio	75	90	100	120	150	180	200
		r/min	20	17	15	12.5	10	8	7.5
9CIDG□-120F2P	9PBK□BH 9PFK□BH	kgfcm	200.0	200.0	200.0	200.0	200.0	200.0	200.0
		N.m	19.60	19.60	19.60	19.60	19.60	19.60	19.60

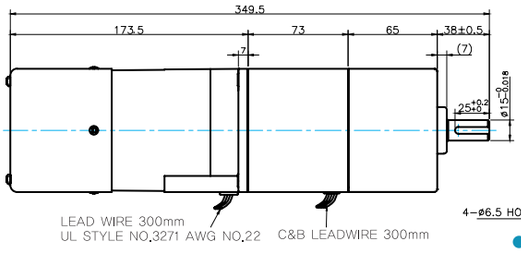
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the 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

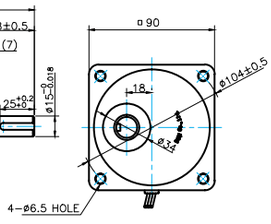
GEARED MOTOR

P TYPE GEARBOX

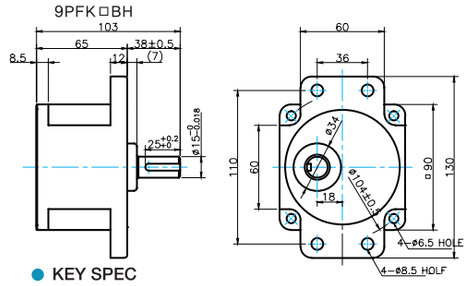
● MOTOR MODEL:
9CIDG□-120F2P



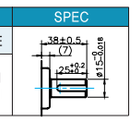
● GEARBOX MODEL:
9PBK□BH



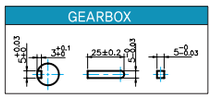
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

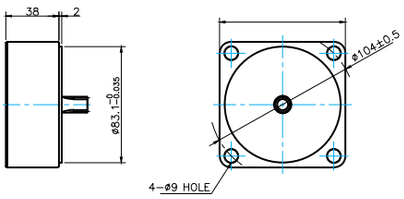
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

GEARBOX


INTER-DECIMAL GEARBOX

● MODEL:
9XD10□□



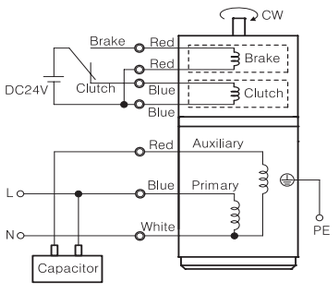
WEIGHT

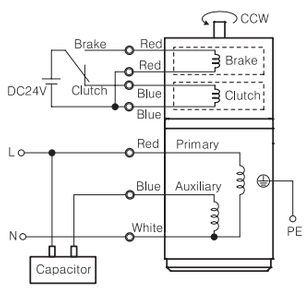
PART		WEIGHT(kg)
MOTOR		4.75
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9XD10○○	0.60

*The output flange and shaft are sold separately.

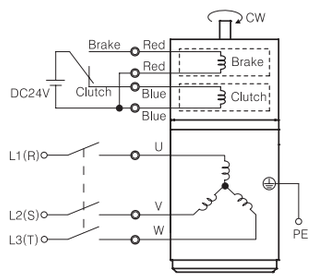
Connection Diagrams

Single Phase





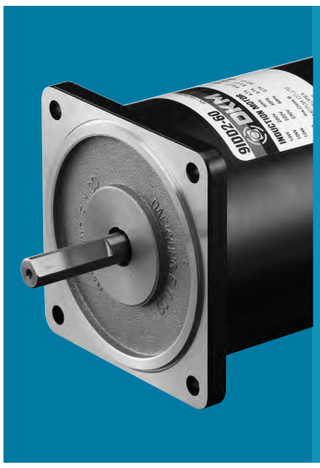
Three Phase



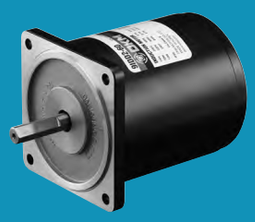
* CCW Direction:
Change any two connections among R, S and T.

INPUT \ LEAD WIRE	U	V	W
3Φ 200V~230V (3, G, J)	WHITE	RED	BLACK
3Φ 380V~400V (4, K)	WHITE	BLUE	BLACK
3Φ 415V~440V (5, L)	WHITE	YELLOW	BLACK

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) Change the direction of single phase motor rotation only after bringing the motor to a stop. If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction after some delay.



Torque Motor



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Torque Motor 6W (□70mm)	B-191
Torque Motor 10W (□80mm)	B-193
Torque Motor 20W (□90mm)	B-195
Torque Motor 30W (□90mm)	B-197
Torque Motor 40W (□90mm)	B-200
Torque Motor 60W (□90mm)	B-203

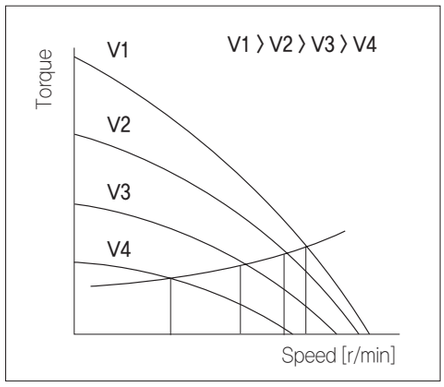
Outline of Torque Motor

Features

Torque motors are designed for providing high torque and sloping characteristics. (Torque is highest at zero speed and decreases steadily as speed increases.)

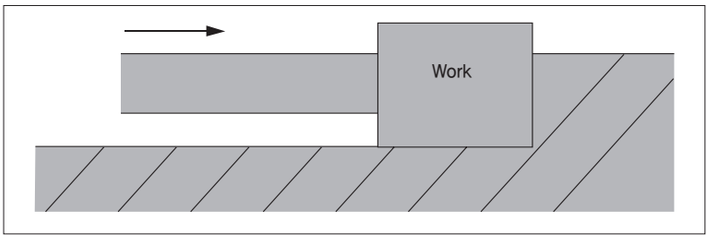
Various Speed over a Wide Range

The torque is approximately in proportion to the square of the voltage. Easy speed control is available by changing the voltage of the power supply.



Locked Operation

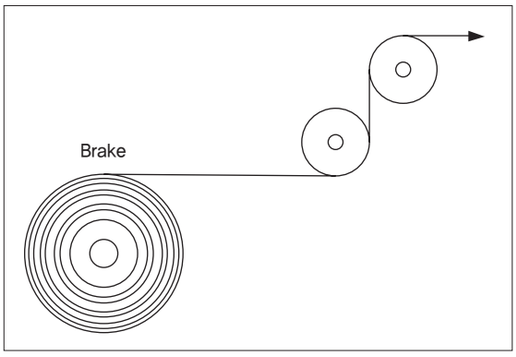
Torque motors are designed to provide stable torque even under stall conditions or at very low speeds (nearly stop). It is available only in torque motors not in induction or reversible motors. They are suitable for pushing applications that require static torque, or for loads that are usually under a locked rotor condition and are under stall conditions at the end of processes. At 60VAC or less the continuous operation is possible but when it is used at voltages above 60VAC, the motors are rated for limited duty. The motor has a about 5-minute rating at 115VAC or 220 VAC.

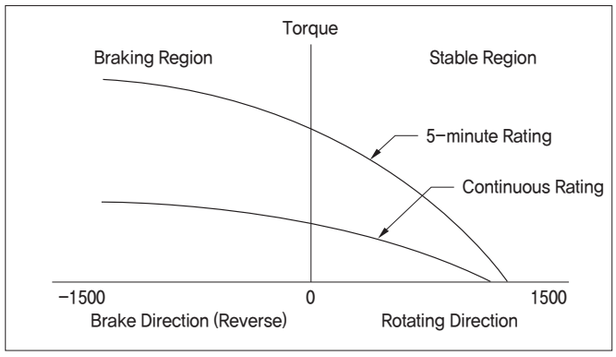


***Note** : When using a motor in locked rotor condition, the output torque becomes very large. The output torque of the gearbox must be lower than the maximum permissible torque. Also ensure that the load does not hit an object and stop, since this can cause damage to the gearbox due to the shock.

Use as a Brake

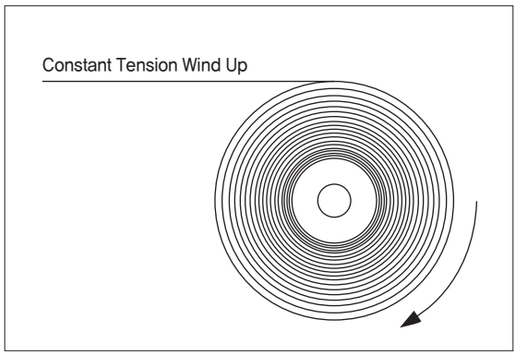
By using the motor in the braking region of the speed-torque characteristics, it can serve as a brake.
Constant tension control can be achieved by applying a DC voltage.





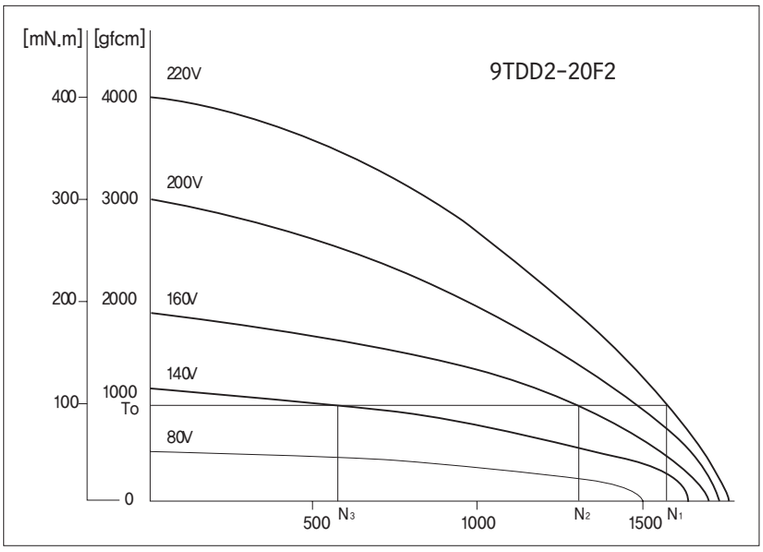
Suitable for Winding Applications

In an application where an object is released continuously at a constant speed and wound up with constant tension, the torque must be doubled and the speed must be halfed if the diameter of the winding spool is doubled.



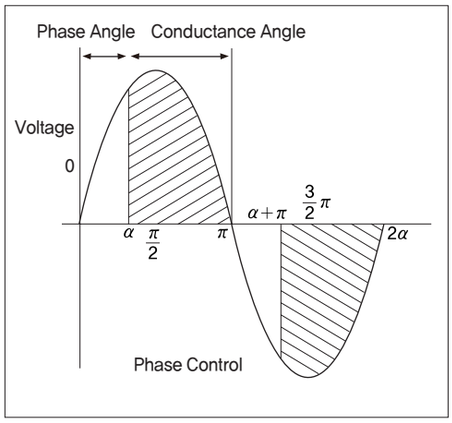
Speed-Torque Characteristics

- The torque of torque motor is approximately in proportion to the square of the voltage. When the voltage supplied to the motor is changed, speed-torque curves with sloping characteristics (torque is highest at zero speed and decreases steadily as speed increases) will be corresponding voltage. If the voltage is changed to 115VAC, 80VAC and 60VAC while the load torque is T0, the motor rotates at the speeds N1, N2 and N3 respectively. That is to say, the speed can be changed easily by varying the voltage.
  In choosing a torque motor, determine the required torque and speed first and then select a motor using the speed-torque characteristics curves to determine whether the motors should be operated under continuous duty or limited duty. In using motor under locked rotor conditions, only the torque factor is considered.



Voltage Control of Torque Motor

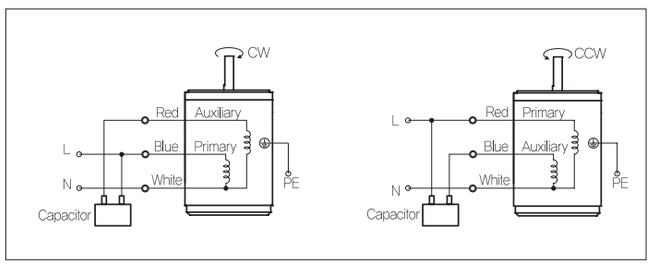
- As shown in the graph, as the phase angle "alpha" at which the triac switches changes, the input voltage is controlled as represented by the phase angle areas of the graph. When changing the speed or the torque, an external voltage controller is needed.



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 gearbox 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



FX3000 Torque Controller

Special Features

- **Easy, Simple Wiring**
  Possible to control the speed and torque of the motor simply by connecting a motor and control unit with connector and inputting the AC terminal to the power source.

- **Easy Wiring and Maintenance**
  The screwless connector is used for FX3000.

- **Efficient and Convenient Operation**
  Possible to control speed and torque easily with the front panel dial.

- **Digital Display**
  Display the current rotation speed(r/min) and torque(%).

- **Various Functions**
  Possible to operate various functions by setting the parameter.

General Specifications

Model	FX3000-□□	
Rated Voltage	1Ø AC 220~240V 50/60Hz ±10 %	
Allowable Current	Below 6 A	
Control Function	Speed Control, Torque Control	
Control System	Phase Control	
Setting Range	Speed Control	50Hz : 90~1400r/min 60Hz : 90~1700r/min
	Torque Control	0 ~ 100 %
Speed Setting	Setting by Volume	
Speed Variation	±5%(Standard Value)	
Motor Output	3W~180W	
Ambient Temperature	-10C°~ 55C°	
Ambient Humidity	35 ~ 85%RH (Without condensation)	
Insulation Resistance	Over DC 500V 100MΩ (between power supply and external terminal)	
Dielectric Strength	AC 1500V 1minute (between power supply and external terminal)	

CONTROLLER CODING SYSTEM

FX3000 — 060 S

Controller Model

OUTPUT

003: 3W	**030**: 30W
006: 6W	**040**: 40W
010: 10W	**060**: 60W
015: 15W	**090**: 90W
020: 20W	**120**: 120W
025: 25W	**180**: 180W

TYPE

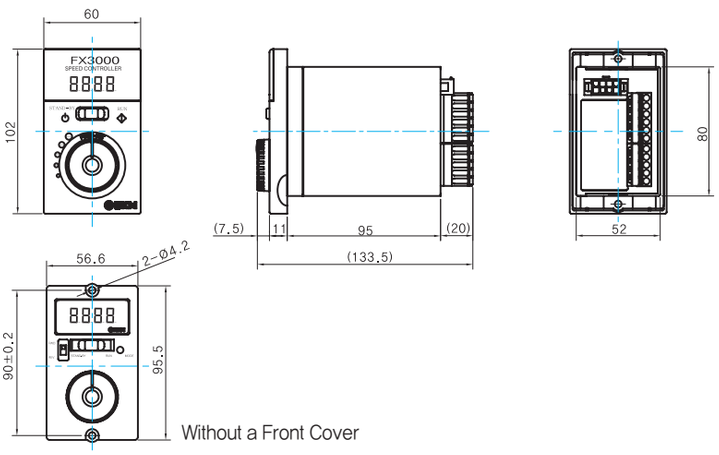
S: Speed Control Motor
T: Torque Control Motor

*Initial setting mode is speed control.
Please change to '1' (torque motor) on parameter 'Pr04'(control mode), if using torque motor. Regarding changing method, please refer to 'Parameter Setting Procedure'.

Combination Table

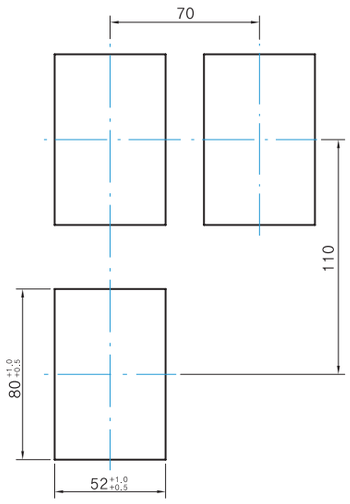
Item	Output	Motor Model	Controller Model
TORQUE MOTOR	3W	6TD□□-3□	FX3000-003 T
	6W	7TD□□-6□	FX3000-006 T
	10W	8TD□□-10□	FX3000-010 T
	20W	9TD□□-20F2□	FX3000-020 T
	30W	9TD□□-30F2□	FX3000-030 T
	40W	9TD□□-40F2□	FX3000-040 T
	60W	9TD□□-60F2□	FX3000-060 T

Dimensions



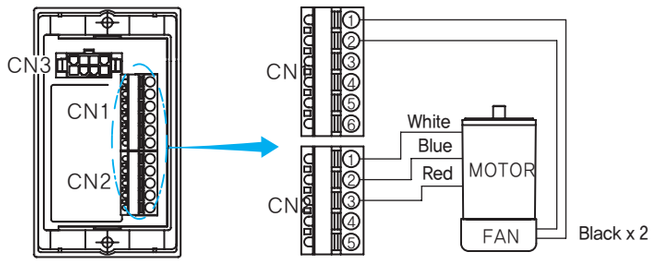
Without a Front Cover

Mounting Panel Dimension



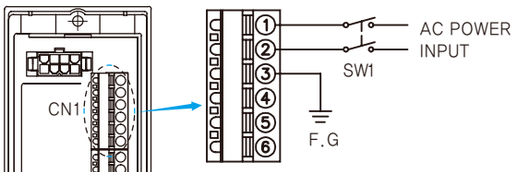
Connection Diagram

Torque Control Motor Connection Diagram



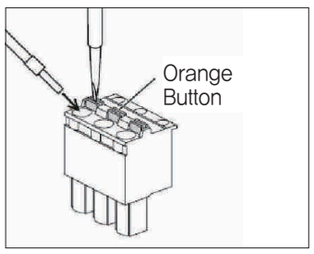
※ Depending on the motor type and specification, there can be no powerful fan cable (Black x2).

Controller Power Connection



→ AC power: Connect #1 and #2 on terminal CN1.
→ Earth: Connect #3 on terminal CN1.

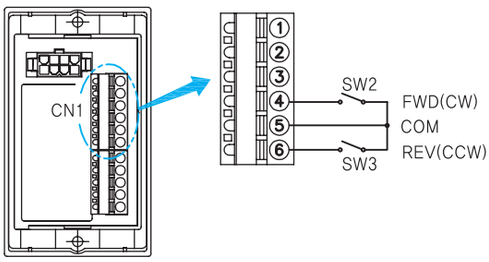
SW1	Above AC 125V or 250V 5A



※ Lead wire
- AWG18~14(0.75~2.0 ㎟)

■ Lead wire connection
→ Input the lead wire while pressing the orange button with a screw driver.

Connection for Uni-directioinal operation



* In case of RUN/ STOP operation externally, please make sure that the switch position should be on STAND-BY and connect #4, #5, and #6 on terminal CN1.

SW2	SW3	Motor Shaft
ON	OFF	Rotate to FWD
OFF	ON	Rotate to REV
OFF	OFF	STOP

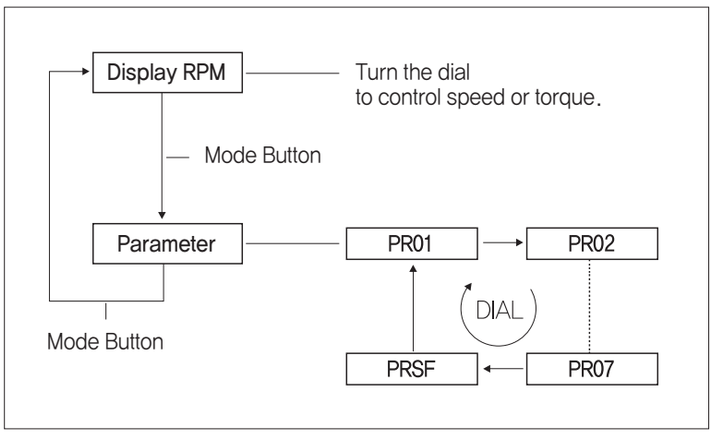
※ Front switch should be at STAND-BY position when operating by external signal. (Connect only for external RUN/STOP)

Parameter Contents

Parameter		Function	Range	Standard Value	Remark
NO.	Display				
1	Pr01	Acceleration Time	0~15.0	0.1	Time(second) to reach the set speed
2	Pr02	Rotation Direction	0,1	0	0 : Clockwise 1 : Counterclockwise
3	Pr03	Gear Ratio	1~999	1.0	Input gear ratio
4	Pr04	Control Mode	0,1	0	0: Speed Control 1: Torque Control
5	Pr05	P Gain	0~255	100	
6	Pr06	I Gain	0~255	50	
7	Pr07	Parameter Reset	–	0	Reset when pressing and holding the SET button
SF	PrSF	Software Version	–	–	Display the software version

* Speed Control P, I gain
– Parameter which determines responsibility of speed control.
– Vibration and hunting may occur if the value is too large.

Product Formation



※ Press the dial(SET button) to enter the parameter data.
※ Press and hold the dial(SET button) to change the parameter data.

DX3000 Torque Controller

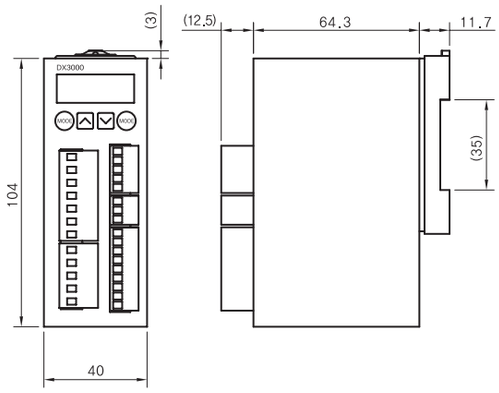
Features

- **RS485 Communication**
  Possible to connect up to 255 devices with Modbus communication protocol.
- **PLC I/O Control**
  Control the system by PLC I/O (No Need Relay)
- **Easy Wiring and Maintenance**
  Easy installation and detachment with connector (Easy maintenance)
  Simple installation in DIN rail
- **Digital Display**
  Display the current rotation speed(r/min) and torque(%) on the screen.
  Possible to connect a external touch screen and adjust speed.
- **Various Parameter Function**
  Possible to operate various functions by setting the parameter.

General Specifications

Model			DX3000
General Specifi cations	Power Supply	Motor Power	AC 220~240V 50Hz / 60Hz ±10%
		Control Power	DC 24V ±10%
	Rated Current [A]		4
	Max. Current [A]		6
	Control Function		Speed Control, Torque Control
	Control System		Phase-Duty Control
	Dimension [mm]		40(W) × 104(H) × 65(D)
	Speed Control Range		50Hz : 100 ~ 1460 r/min 60Hz : 100 ~ 1760 r/min
	Torque Control Range		0 ~ 100% (Maximum Torque)
	Feedback Sensor		Tacho - 12 ppr
	Ambient Temperature		-10 ℃ ~ 55 ℃
I nput & Output specifi cations	Sequence Input		Forward, Reverse, Alarm reset, Velocity select
	Sequence Output		Speed pulse out, Alarm out
Built-in Functions	Protection Function		Parameter error, AC low voltage alarm, EEPROM
	Condition Mark		4 Digit Display (7-Segment)
Communication Mode			Serial Communication (RS485 - MODBUS RTU)

Dimensions



RS 485 Communication

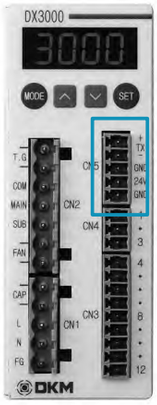
■ Communication Mode

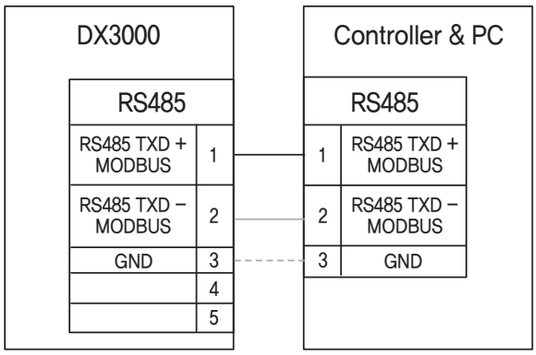
→ MODBUS RTU Slave Mode

■ Register Support

→ 0x03 (Read Holding Registers)
→ 0x04 (Read Input Registers)
→ 0x06 (Write Single Registers)
→ 0x03 (Read Holding Registers)

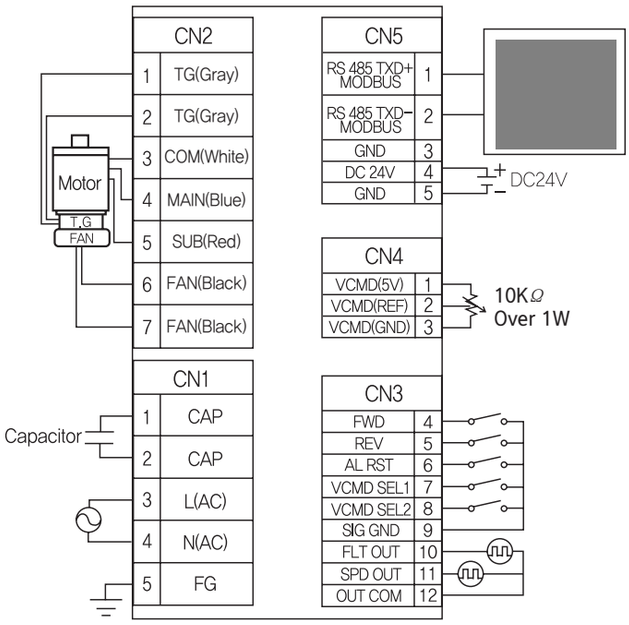
■ Communication Connection Diagram





– When connecting the communication GND, please connect GND of Controller & PC to PIN No. 3 of CN5.
– Please visit our website to download communication manual.

Controller Connection Diagram



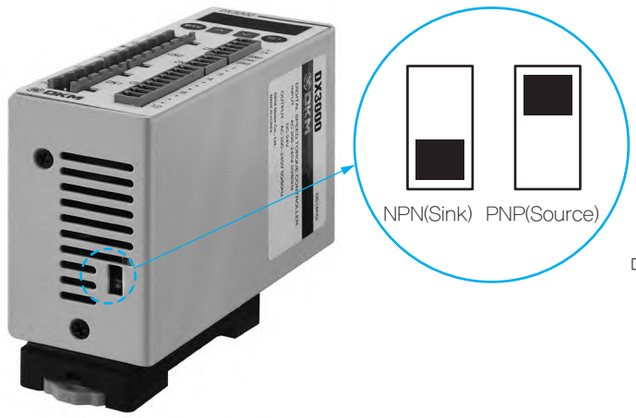
Function of CN4 Connector

NO.	Name	Description	Remark
1	VCMD V	External speed command potentiometer + voltage output	5V Output
2	VCMD Vref	External speed directive value input	Voltage input
3	VCMD GND	Connect to external speed directive GND	V GND

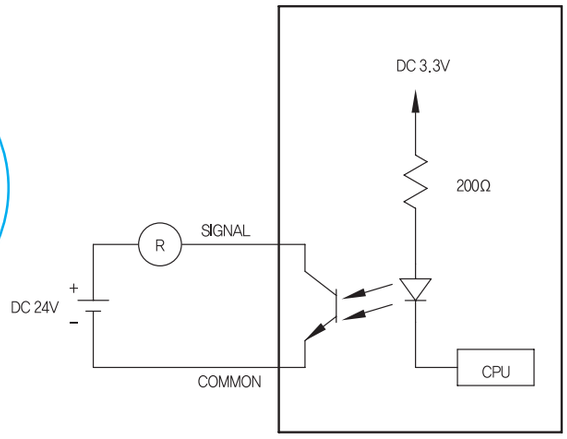
Function of CN3 Connector

NO.	Name	Description	Remark
4	FORWARD RUN	Forward operation switch	Input Signal
5	REVERSE RUN	Reverse operation switch	Input Signal
6	ALARM RESET	Alarm reset switch	Input Signal
7	SPEED SELECT1	Input select switch between internal and external input * Select operation mode with parameter No.7 * Internal Speed: Parameter No.30~No.32 * External Speed: External variable resistance * Internal Torque: Parameter No.33~No.35 * External Torque: External variable resistance	Input Signal
8	SPEED SELECT2		
9	SIGNAL COMMON	Motor switch input COMMON	COMMON
10	FAULT OUT	Output controller status * Change output contact (A or B) according to parameter No.10	Output Signal
11	SPEED OUT	Motor operating speed output * 12 Pulse output per a rotation of the motor	Output Signal
9	OUT COMMON	Output Contact Common	COMMON

I/O Signal Circuit

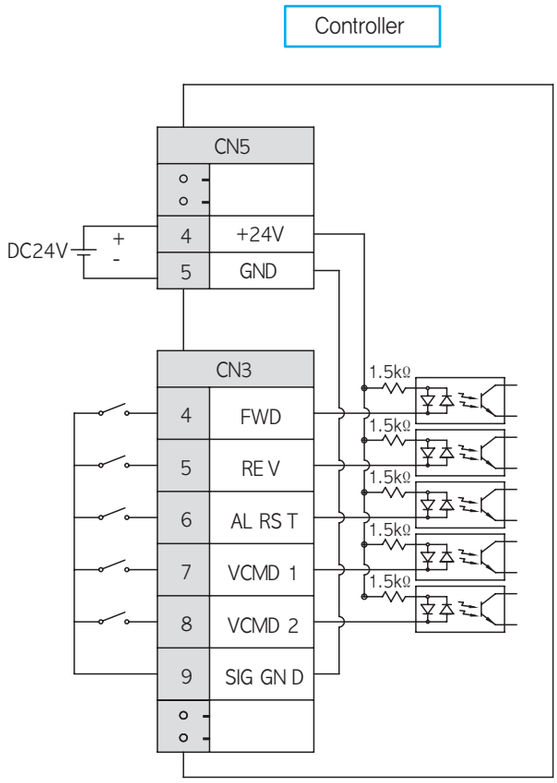


Output Circuit

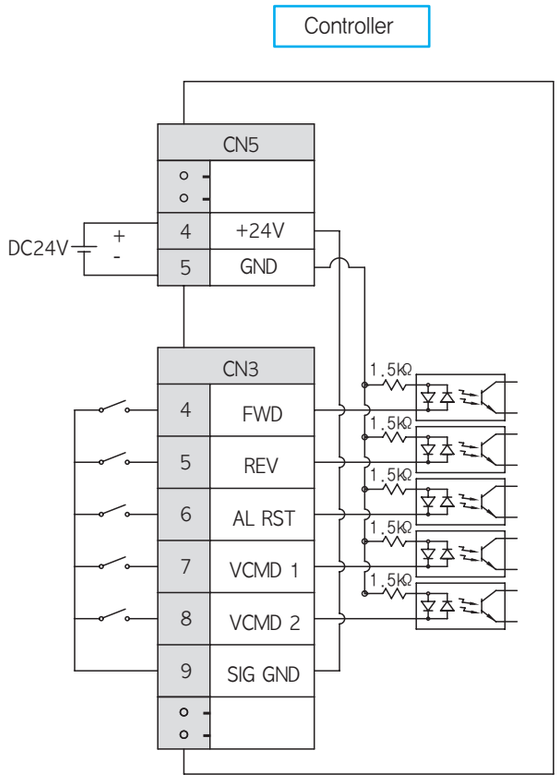


- Input COMMON(NPN, PNP) is set with the bottom switch of controller internal circuit board
- Initial Setting: NPN

Input Circuit



| Sink Logic |



| Source Logic |

Parameter Contents

NO.	Function	Range	Standard value	Note
1	Max. Speed	1460/1760	–	r/min
3	Speed Limit	50~1760	1760	r/min
4	Acceleration Time	0~15.0	0.1	Second (S)
5	Rotation Direction	0~1	0	
6	Gear Ratio	1~250	1	0
7	Control Mode	0~1	0	0 : Speed Control 1 : Torque Control
8	Zero Clamp	0~0.5	0.0	Voltage (V)
9	Speed Command Offset	0~0.5	0	Voltage (V)
10	Abnormal Signal Output	0~1	0	
13	Speed Control P Gain	1~255	100	
14	Speed Control I Gain	1~255	50	
20	Communication ID Setting	1~254	1	
21	IO Input Setting	0~1	0	0 : CN310 Input 1 : RS485 Input
22	Speed Input Setting	0~1	0	0:CN4 Potentiometer Input 1:RS485 Speed Command input
23	RS485 Communication Speed Setting	0~4	1	0:2,400 bps 1:9,600 bps 2:19,200 bps 3:38,400 bps 4:115,200 bps
30	Internal Speed Setting 1	0~Max. Speed	500	r/min
31	Internal Speed Setting 2	0~Max. Speed	1000	r/min
32	Internal Speed Setting 3	0~Max. Speed	1500	r/min
33	Internal Torque Setting 1	0~100	10	%
34	Internal Torque Setting 2	0~100	20	%
35	Internal Torque Setting 3	0~100	50	%

■ Speed control P, I gain

– Parameter which determines responsibility of speed control

– Vibration and hunting occur if value is too large

3W Torque Motor 3W(□60mm)

Motor Specification

Model 6TDG*-3G: Gear Type Shaft 6TDD*-3: D-Cut Type Shaft		Rating at Locked Rotor	Voltage V	Frequency Hz	Poles	Starting Torque kgfcm	Starting Torque N.m	At max. Output Power: Output W	Speed r/min	Current A	Torque kgfcm	Torque N.m	Capacitor μF / VAC
Connector Type	Lead Wire Type												
6TD◇1(A)-3□-C	6TD◇1(A)-3□-C	5min.	1ø 110	60	4	0.66	0.066	3	900	0.30	0.32	0.032	3.5 / 250
		Cont.	1ø 60			0.26	0.026	1		0.22	0.11	0.011	
6TD◇2(D)-3□-C	6TD◇2(D)-3□-C	5min.	1ø 220	60	4	0.72	0.072	3		0.17	0.32	0.032	1.0 / 450
		Cont.	1ø 140			0.27	0.027	1		0.13	0.11	0.011	
6TD◇E-3□-C	6TD◇E-3□-C	5min.	1ø 220~240	50	4	0.58	0.058	3	750	0.15	0.39	0.039	1.0 / 450
		Cont.	1ø 140			0.22	0.022	1		0.10	0.13	0.013	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) Impedance Protected Type.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

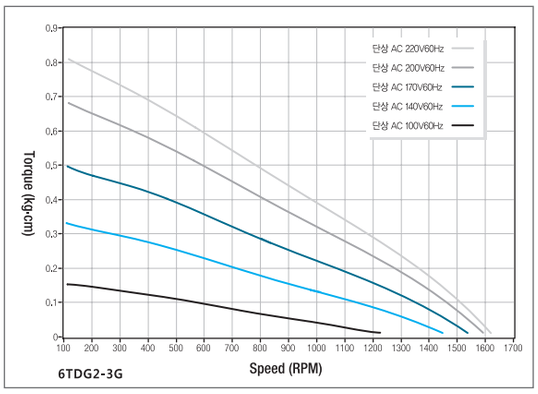
Motor Model	Gearbox Model	Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
6TDG*-3G	6GBD□MH	5min.	kgfcm	0.8	0.9	1.3	1.6	2.0	2.4	2.6	3.3	3.9	4.7	4.7	5.9	7.1	8.5	9.5	10.7	12.9	16.1	19.3	21.4	25.7	30.0	30.0	30.0	30.0
			N.m	0.08	0.09	0.13	0.15	0.19	0.23	0.26	0.32	0.39	0.46	0.46	0.58	0.70	0.84	0.93	1.05	1.26	1.57	1.89	2.10	2.52	2.94	2.94	2.94	2.94
		Cont.	kgfcm	0.3	0.3	0.4	0.5	0.7	0.8	0.9	1.1	1.3	1.6	1.6	2.0	2.4	2.8	3.2	3.6	4.3	5.4	6.4	7.1	8.6	10.7	12.9	14.3	17.9
			N.m	0.03	0.03	0.04	0.05	0.06	0.08	0.09	0.11	0.13	0.15	0.15	0.19	0.23	0.28	0.31	0.35	0.42	0.52	0.63	0.70	0.84	1.05	1.26	1.40	1.75

50Hz

Motor Model	Gearbox 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	200	250
6TDG*-3G	6GBD□MH	5min.	kgfcm	0.9	1.1	1.6	1.9	2.4	2.8	3.2	3.9	4.7	5.7	5.7	7.1	8.5	10.2	11.4	12.9	15.4	19.3	23.1	25.7	30.0	30.0	30.0	30.0	30.0
			N.m	0.09	0.11	0.15	0.19	0.23	0.28	0.31	0.39	0.46	0.56	0.56	0.70	0.84	1.00	1.11	1.26	1.51	1.89	2.27	2.52	2.94	2.94	2.94	2.94	2.94
		Cont.	kgfcm	0.3	0.4	0.5	0.6	0.8	0.9	1.1	1.3	1.6	1.9	1.9	2.4	2.8	3.4	3.8	4.3	5.1	6.4	7.7	8.6	10.3	12.9	15.4	17.1	21.4
			N.m	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.13	0.15	0.19	0.19	0.23	0.28	0.33	0.37	0.42	0.50	0.63	0.76	0.84	1.01	1.26	1.51	1.68	2.10

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the 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.

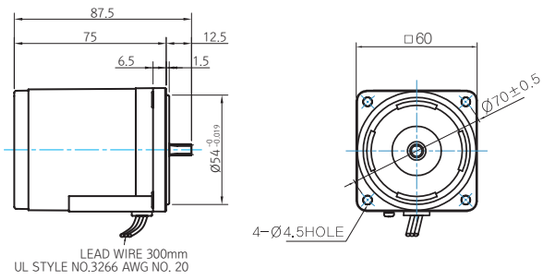
Speed-Torque Characteristics



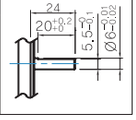
Dimensions

MOTOR ONLY

● MOTOR MODEL: 6TD□□-3 (NO FAN)



● MOTOR OUTPUT SHAFT

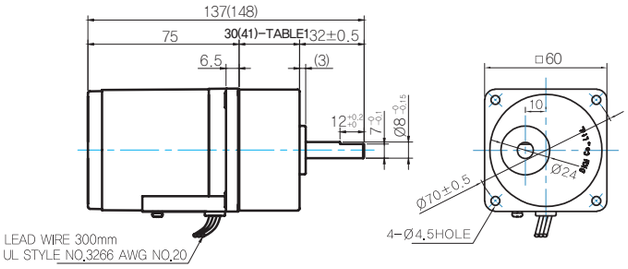
MODEL	SPEC
D-CUT TYPE	
6TDD□-3	

GEARED MOTOR

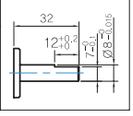
G TYPE GEARBOX

● MOTOR MODEL:
6TDG□-3G (NO FAN)

● GEARBOX MODEL:
6GBD□MH



● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KYE TYPE	
6GBD□MH	

WEIGHT

PART		WEIGHT(kg)
MOTOR		0.70
GEAR BOX	6GBD3MH - 6GBD18MH	0.30
	6GBD20MH - 6GBD40MH	0.32
	6GBD50MH - 6GBD250MH	0.34

*The output flange and shaft are sold separately.

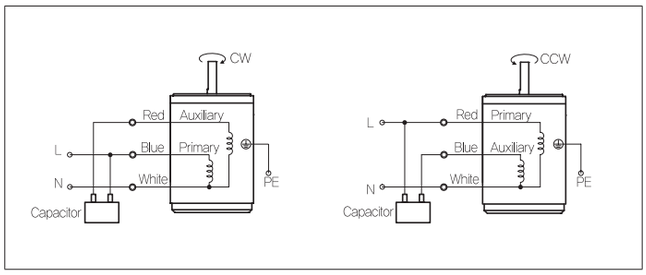
● 30(41)-Table1

SIZE(mm)	GEAR RATIO
30	6GBD3MH - 6GBD18MH
41	6GBD20MH - 6GBD250MH

Motor Images

6TDD□-3	6TDG□-3G+6GBD□MH

Connection Diagrams



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) Change the direction of single phase motor rotation only after bringing the motor to a stop. If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction after some delay.

6W Torque Motor 6W(□70mm)

Motor Specification

Model 7TDG*-6G: Gear Type Shaft 7TDD*-6: D-Cut Type Shaft		Rating at Locked Rotor	Voltage V	Frequency Hz	Poles	Starting Torque kgfcm	Starting Torque N.m	At max. Output Power Output W	Speed r/min	Current A	Torque kgfcm	Torque N.m	Capacitor μF / VAC
Connector Type	Lead Wire Type												
7TD◇1(A)-6□-C	7TD◇1(A)-6□-L	5min.	1ø 110	60	4	0.96	0.096	6	900	0.51	0.65	0.065	6.0 / 250
		Cont.	1ø 60			0.33	0.033	2		0.38	0.22	0.022	
7TD◇2(D)-6□-C	7TD◇2(D)-6□-C	5min.	1ø 220	60	4	1.05	0.105	6		0.24	0.65	0.065	1.5 / 450
		Cont.	1ø 140			0.37	0.037	2		0.18	0.22	0.022	
7TD◇E-6□-C	7TD◇E-6□-L	5min.	1ø 220~240	50	4	0.91	0.091	6	750	0.22	0.78	0.078	1.5 / 450
		Cont.	1ø 140			0.36	0.036	2		0.15	0.26	0.026	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

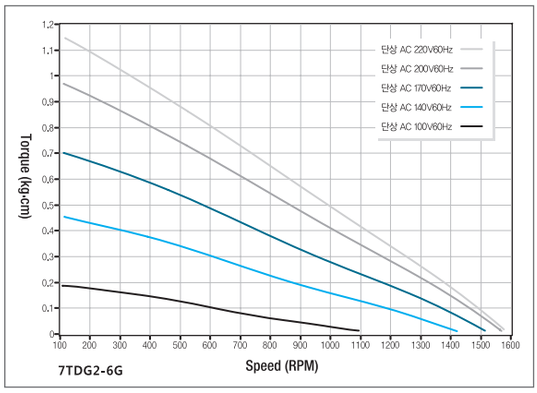
Motor Model	Gearbox Model	Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
7TDG*-6G	7GBK□BMH	5min.	kgfcm	1.6	1.9	2.6	3.2	3.9	4.7	5.3	6.6	7.9	9.5	9.5	11.9	14.2	17.1	19.0	21.4	25.7	32.1	38.6	42.9	50.0	50.0	50.0	50.0
			N.m	0.15	0.19	0.26	0.31	0.39	0.46	0.52	0.64	0.77	0.93	0.93	1.16	1.39	1.67	1.86	2.10	2.52	3.15	3.78	4.20	4.90	4.90	4.90	4.90
		Cont.	kgfcm	0.5	0.6	0.9	1.1	1.3	1.6	1.8	2.2	2.6	3.2	3.2	4.0	4.7	5.7	6.3	7.1	8.6	10.7	12.9	14.3	17.1	21.4	25.7	28.6
			N.m	0.05	0.06	0.09	0.10	0.13	0.15	0.17	0.21	0.26	0.31	0.31	0.39	0.46	0.56	0.62	0.70	0.84	1.05	1.26	1.40	1.68	2.10	2.52	2.80

50Hz

Motor Model	Gearbox 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	200
7TDG*-6G	7GBK□BMH	5min.	kgfcm	1.9	2.3	3.2	3.8	4.7	5.7	6.3	7.9	9.5	11.4	11.4	14.2	17.1	20.5	22.8	25.7	30.9	38.6	46.3	50.0	50.0	50.0	50.0	50.0
			N.m	0.186	0.22	0.31	0.37	0.46	0.56	0.62	0.77	0.93	1.11	1.11	1.39	1.67	2.01	2.23	2.52	3.02	3.78	4.54	4.90	4.90	4.90	4.90	4.90
		Cont.	kgfcm	0.6	0.8	1.1	1.3	1.6	1.9	2.1	2.6	3.2	3.8	3.8	4.7	5.7	6.8	7.6	8.6	10.3	12.9	15.4	17.1	20.6	25.7	30.9	34.3
			N.m	0.062	0.07	0.10	0.12	0.15	0.19	0.21	0.26	0.31	0.37	0.37	0.46	0.56	0.67	0.74	0.84	1.01	1.26	1.51	1.68	2.02	2.52	3.02	3.36

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the 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.

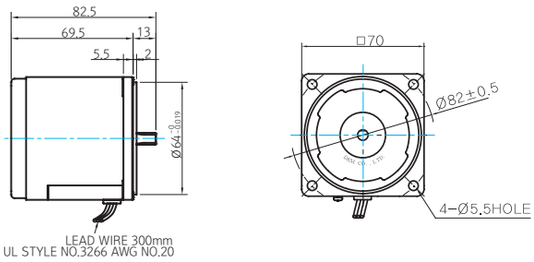
Speed-Torque Characteristics



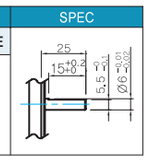
Dimensions

MOTOR ONLY

- MOTOR MODEL: 7TD□□-6 (NO FAN)



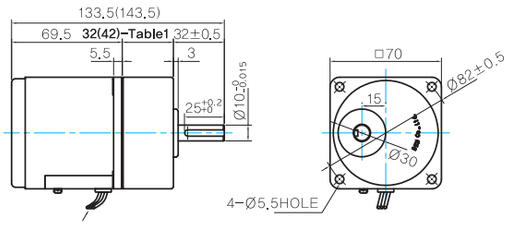
- MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
7TDD□-6	

GEARED MOTOR

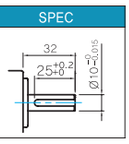
G TYPE GEARBOX

- MOTOR MODEL: 7TDG□-6G (NO FAN)
- GEARBOX MODEL: 7GBK□BMH

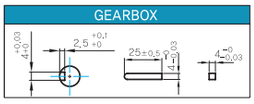


LEAD WIRE 300mm
UL STYLE NO.3266 AWG NO.20

- GEARBOX OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
7GBK□BMH	

- KEY SPEC

GEARBOX


WEIGHT

PART		WEIGHT(kg)
MOTOR		0.80
GEAR BOX	7GBK3BMH - 7GBK18BMH	0.38
	7GBK20BMH - 7GBK40BMH	0.48
	7GBK50BMH - 7GBK200BMH	0.53

*The output flange and shaft are sold separately.

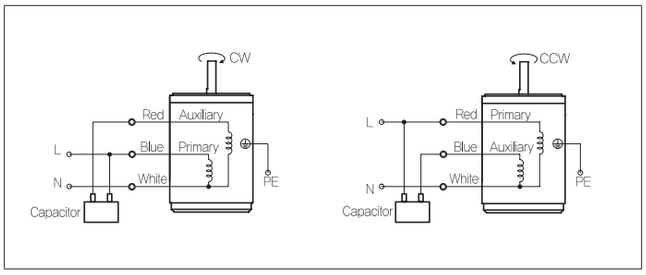
- 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH – 7GBK18BMH
42	7GBK20BMH – 7GBK200BMH

Motor Images

7TDD□-6	7TDG□-6G+7GBK□BMH

Connection Diagrams



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) Change the direction of single phase motor rotation only after bringing the motor to a stop. If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction after some delay.

B AC Motors

Torque Motor 10W(□80mm)

10W Torque Motor 10W(□80mm)

Motor Specification

Model 8TDG*-10G: Gear Type Shaft 8TDD*-10: D-Cut Type Shaft		Rating at Locked Rotor	Voltage V	Frequency Hz	Poles	Starting Torque kgfcm	Starting Torque N.m	At max. Output Power Output W	At max. Output Power Speed r/min	At max. Output Power Current A	At max. Output Power Torque kgfcm	At max. Output Power Torque N.m	Capacitor μF / VAC
Connector Type	Lead Wire Type												
8TD◇1(A)-10□-C	8TD◇1(A)-10□-L	5min.	1ø 110	60	4	2.65	0.265	10	900	0.82	1.08	0.108	10.0 / 250
		Cont.	1ø 60			0.72	0.072	3		0.53	0.32	0.032	
8TD◇2(D)-10□-C	8TD◇2(D)-10□-L	5min.	1ø 220	60	4	2.12	0.212	10		0.32	1.08	0.108	2.0 / 450
		Cont.	1ø 140			0.80	0.080	3		0.23	0.32	0.032	
8TD◇E-10□-C	8TD◇E-10□-L	5min.	1ø 220~240	50	4	1.94	0.194	10	750	0.28	1.30	0.130	2.0 / 450
		Cont.	1ø 140			0.78	0.078	3		0.18	0.39	0.039	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

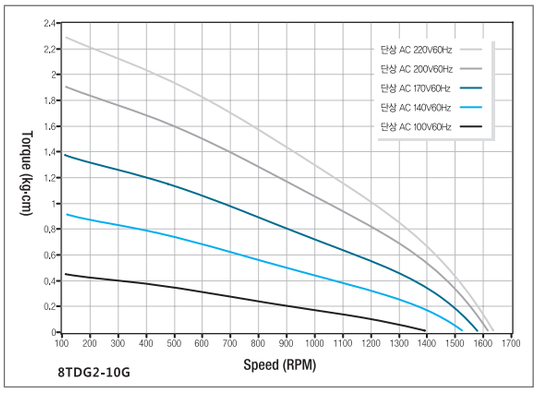
Motor Model	Gearbox Model	Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250	300	360
8TDG*-10G	8GBK□BMH	5min.	kgfcm	2.6	3.2	4.4	5.3	6.6	7.9	8.8	11.0	13.1	15.8	15.8	19.8	23.7	28.4	31.6	35.7	42.9	53.6	64.3	71.4	80.0	80.0	80.0	80.0	80.0	80.0	80.0
			N.m	0.26	0.31	0.43	0.52	0.64	0.77	0.86	1.07	1.29	1.55	1.55	1.94	2.32	2.79	3.10	3.50	4.20	5.25	6.30	7.00	7.84	7.84	7.84	7.84	7.84	7.84	7.84
		Cont.	kgfcm	0.8	0.9	1.3	1.6	2.0	2.4	2.6	3.3	3.9	4.7	4.7	5.9	7.1	8.5	9.5	10.7	12.9	16.1	19.3	21.4	25.7	32.1	38.6	42.9	53.6	64.3	77.1
			N.m	0.08	0.09	0.13	0.15	0.19	0.23	0.26	0.32	0.39	0.46	0.46	0.58	0.70	0.84	0.93	1.05	1.26	1.57	1.89	2.10	2.52	3.15	3.78	4.20	5.25	6.30	7.56

50Hz

Motor Model	Gearbox 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	200	250	300	360
8TDG*-10G	8GBK□BMH	5min.	kgfcm	3.2	3.8	5.3	6.3	7.9	9.5	10.5	13.1	15.8	18.9	19.0	23.7	28.4	34.1	37.9	42.9	51.4	64.3	77.1	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
			N.m	0.31	0.37	0.52	0.62	0.77	0.93	1.03	1.29	1.55	1.86	1.86	2.32	2.79	3.34	3.72	4.20	5.04	6.30	7.56	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
		Cont.	kgfcm	0.9	1.1	1.6	1.9	2.4	2.8	3.2	3.9	4.7	5.7	5.7	7.1	8.5	10.2	11.4	12.9	15.4	19.3	23.1	25.7	30.9	38.6	46.3	51.4	64.3	77.1	80.0
			N.m	0.09	0.11	0.15	0.19	0.23	0.28	0.31	0.39	0.46	0.56	0.56	0.70	0.84	1.00	1.11	1.26	1.51	1.89	2.27	2.52	3.02	3.78	4.54	5.04	6.30	7.56	7.84

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the 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.

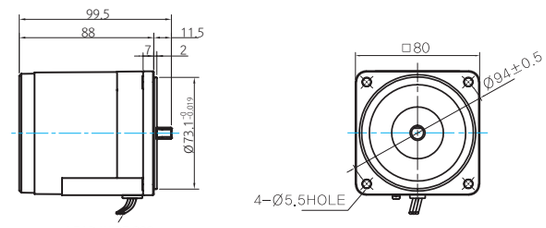
Speed-Torque Characteristics



Dimensions

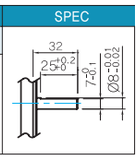
MOTOR ONLY

● MOTOR MODEL: 8TD□□-10 (NO FAN)



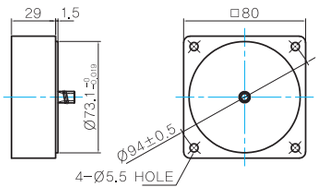
LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.20

● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
8TDD□-10	

INTER-DECIMAL GEARBOX

● MODEL: 8XD10□□

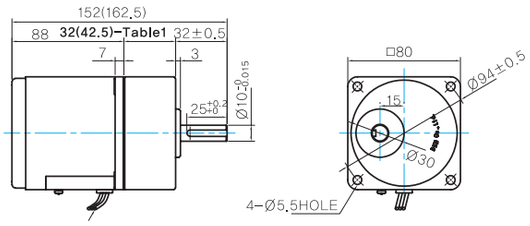


GEARED MOTOR

G TYPE GEARBOX

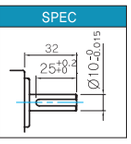
● MOTOR MODEL:
8TDG□-10G (NO FAN)

● GEARBOX MODEL:
8GBK□BMH

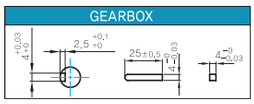


LEAD WIRE 300mm
UL STYLE NO.3271 AWG NO.20

● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
8GBK□BMH	

● KEY SPEC

GEARBOX


WEIGHT

PART		WEIGHT(kg)
MOTOR		1.56
GEAR BOX	8GBK3BMH - 8GBK18BMH	0.56
	8GBK20BMH - 8GBK40BMH	0.65
	8GBK50BMH - 8GBK360BMH	0.72
	8XD10○○	0.45

*The output flange and shaft are sold separately.

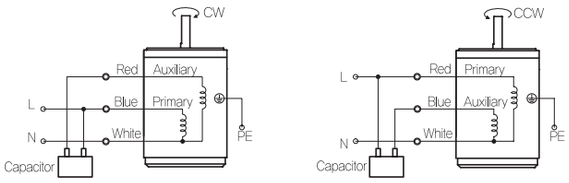
● 32(42.5)-Table1

SIZE(mm)	GEAR RATIO
32	8GBK3BMH - 8GBK18BMH
42.5	8GBK20BMH - 8GBK360BMH

Motor Images

8TDD□-10	8TDG□-10G+8GBK□BMH

Connection Diagrams



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) Change the direction of single phase motor rotation only after bringing the motor to a stop. If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction after some delay.

B AC Motors

Torque Motor 20W(□90mm)

20W Torque Motor 20W(□90mm)

Motor Images

9TDD□-20F2	9TDG□-20F2G+9GBK□BMH	9TDG□-20F2P+9PBK□BH

Motor Specification

Model 9TDG*-20F2□: Gear Type Shaft 9TDD*-20F2: D-Cut Type Shaft 9TDK*-20F2: Key Type Shaft		Rating at Locked Rotor	Voltage V	Frequency Hz	Poles	Starting Torque		At max. Output Power					Capacitor μF / VAC
Connector Type	Lead Wire Type					kgfcm	N.m	Output W	Speed r/min	Current A	Torque kgfcm	Torque N.m	
9TD◇1(A)-20F2□-C	9TD◇1(A)-20F2□-L	5min.	1ø 110	60	4	4.55	0.455	20	900	1.40	2.16	0.216	16.0 / 250
		Cont.	1ø 60			1.25	0.125	7		0.79	0.76	0.076	
9TD◇2(D)-20F2□-C	9TD◇2(D)-20F2□-L	5min.	1ø 220	60	4	4.88	0.488	20		0.63	2.16	0.216	4.0 / 450
		Cont.	1ø 140			2.09	0.209	7		0.45	0.76	0.076	
9TD◇2(D)-20F2□-C	9TD◇E-20F2□-L	5min.	1ø 220~240	50	4	4.49	0.449	20	750	0.55	2.60	0.260	4.0 / 450
		Cont.	1ø 140			1.83	0.183	7		0.36	0.91	0.091	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

Motor Model	Gearbox Model	Gear Ratio		2	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
9TDG*-20F2G	9GBK□BMH	5min.	kgfcm	3.5	5.3	6.3	8.8	10.5	13.1	15.8	17.5	21.9	26.3	31.6	31.6	39.5	47.4	56.9	63.2	71.4	85.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0
			N.m	0.34	0.52	0.62	0.86	1.03	1.29	1.55	1.72	2.15	2.58	3.09	3.10	3.87	4.65	5.57	6.19	7.00	8.40	9.80	9.80	9.80	9.80	9.80	9.80	9.80
		Cont.	kgfcm	1.2	1.8	2.2	3.1	3.7	4.6	5.5	6.1	7.7	9.2	11.0	11.1	13.8	16.6	19.9	22.1	25.0	30.0	37.5	45.0	50.0	60.0	75.0	90.0	100.0
			N.m	0.12	0.18	0.22	0.30	0.36	0.45	0.54	0.60	0.75	0.90	1.08	1.08	1.35	1.63	1.95	2.17	2.45	2.94	3.67	4.41	4.90	5.88	7.35	8.82	9.80

Motor Model	Gearbox Model	Gear Ratio		2	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
9TDG*-20F2P	9PBK□BH 9PFK□BH	5min.	kgfcm	3.5	5.2	6.3	8.7	10.5	13.1	15.7	17.5	19.7	23.7	28.4	31.5	35.6	42.8	51.3	57.0	71.3	85.5	95.6	114.7	127.4	152.9	191.2	200.0	200.0
			N.m	0.34	0.51	0.62	0.85	1.03	1.29	1.54	1.72	1.93	2.32	2.79	3.09	3.49	4.19	5.03	5.59	6.99	8.38	9.37	11.24	12.49	14.98	18.74	19.60	19.60
		Cont.	kgfcm	1.2	1.8	2.2	3.1	3.7	4.6	5.5	6.2	6.9	8.3	10.0	11.1	12.5	15.0	18.1	20.1	25.1	30.1	33.6	40.4	44.8	53.8	67.3	80.7	89.7
			N.m	0.12	0.18	0.22	0.30	0.36	0.45	0.54	0.61	0.68	0.81	0.98	1.08	1.22	1.47	1.77	1.97	2.46	2.95	3.29	3.96	4.39	5.27	6.59	7.91	8.79

50Hz

Motor Model	Gearbox Model	Gear Ratio		2	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
9TDG*-20F2G	9GBK□BMH	5min.	kgfcm	4.2	6.3	7.6	10.5	12.6	15.8	18.9	21.0	26.3	31.6	37.9	37.9	47.4	56.9	68.3	75.8	85.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
			N.m	0.41	0.62	0.74	1.03	1.24	1.55	1.86	2.06	2.58	3.09	3.71	3.72	4.65	5.57	6.69	7.43	8.40	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
		Cont.	kgfcm	1.5	2.2	2.7	3.7	4.4	5.5	6.6	7.4	9.2	11.0	13.3	13.3	16.6	19.9	23.9	26.5	30.0	36.0	45.0	54.0	60.0	72.0	90.0	100.0	100.0
			N.m	0.14	0.22	0.26	0.36	0.43	0.54	0.65	0.72	0.90	1.08	1.30	1.30	1.63	1.95	2.34	2.60	2.94	3.53	4.41	5.29	5.88	7.06	8.82	9.80	9.80

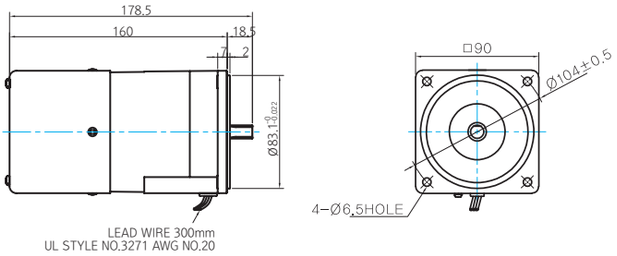
Motor Model	Gearbox Model	Gear Ratio		2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
9TDG*-20F2P	9PBK□BH 9PFK□BH	5min.	kgfcm	4.2	6.3	7.6	10.5	12.6	15.8	19.0	21.1	23.7	28.5	34.2	38.0	42.9	51.5	61.8	68.6	85.8	103.0	115.1	138.1	153.4	184.1	200.0	200.0	200.0
			N.m	0.41	0.62	0.74	1.03	1.24	1.55	1.86	2.06	2.33	2.79	3.35	3.72	4.20	5.05	6.05	6.73	8.41	10.09	11.27	13.53	15.03	18.04	19.60	19.60	19.60
		Cont.	kgfcm	1.5	2.2	2.7	3.7	4.4	5.5	6.6	7.4	8.3	10.0	12.0	13.3	15.0	18.0	21.6	24.0	30.0	36.0	40.3	48.3	53.7	64.4	80.5	96.6	107.4
			N.m	0.14	0.22	0.26	0.36	0.43	0.54	0.65	7.20	0.81	0.98	1.17	1.30	1.47	1.76	2.12	2.35	2.94	3.53	3.95	4.74	5.26	6.31	7.89	9.47	10.52

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft; a white background indicates the 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.

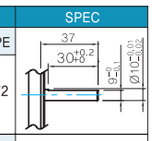
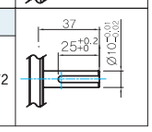
Dimensions

MOTOR ONLY

● MOTOR MODEL: 9TD□□-20F2 (POWERFUL FAN)

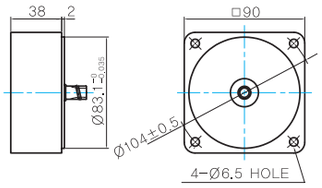


● MOTOR OUTPUT SHAFT

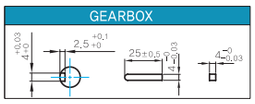
MODEL	SPEC
D-CUT TYPE	
9TDD□-20F2	
KEY TYPE	
9TDK□-20F2	

INTER-DECIMAL GEARBOX

● MODEL: 9XD10□□



● KEY SPEC



WEIGHT

PART		WEIGHT(kg)
MOTOR		3.05
GEAR BOX	9GBK2BMH - 9GBK18BMH	0.78
	9GBK20BMH - 9GBK40BMH	1.10
	9GBK50BMH - 9GBK200BMH	1.20
	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9XD10○○	0.60

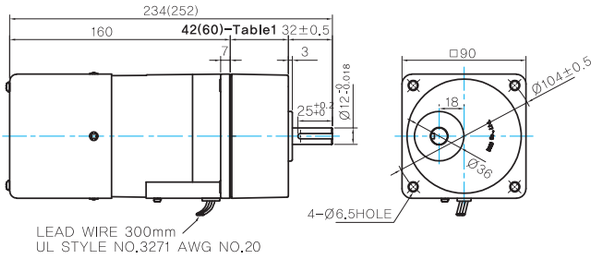
*The output flange and shaft are sold separately.

GEARED MOTOR

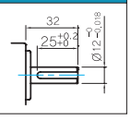
G TYPE GEARBOX

● MOTOR MODEL: 9TDG□-20F2G (POWERFUL FAN)

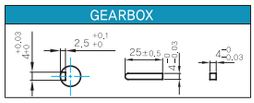
● GEARBOX MODEL: 9GBK□BMH



● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9PBK□BH	

● KEY SPEC



● 42(60)-Table1

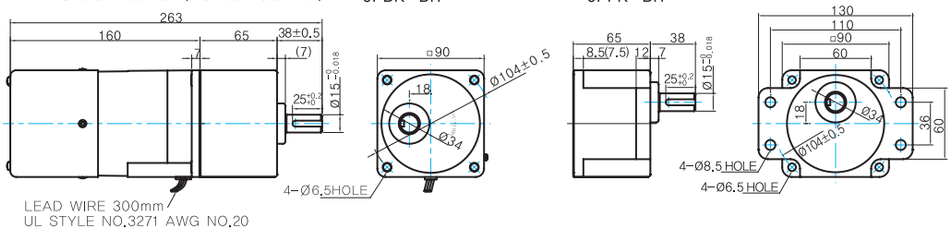
SIZE(mm)	GEAR RATIO
42	9GBK2BMH - 9GBK18BMH
60	9GBK20BMH - 9GBK200BMH

P TYPE GEARBOX

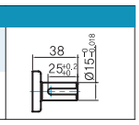
● MOTOR MODEL: 9TDG□-20F2P (POWERFUL FAN)

● GEARBOX MODEL: 9PBK□BH

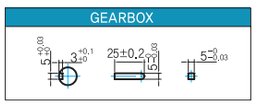
● GEARBOX MODEL: 9PFK□BH



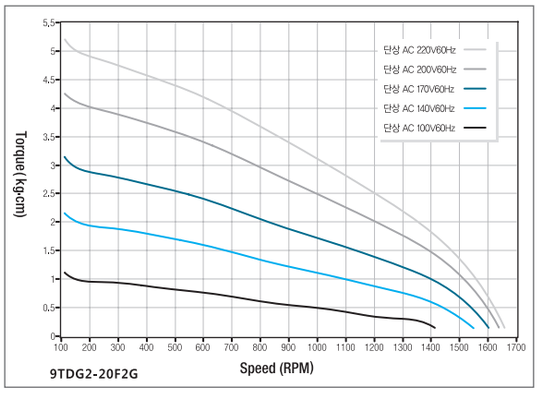
● GEARBOX OUTPUT SHAFT

KEY TYPE 9PBK□BH 9PFK□BH	

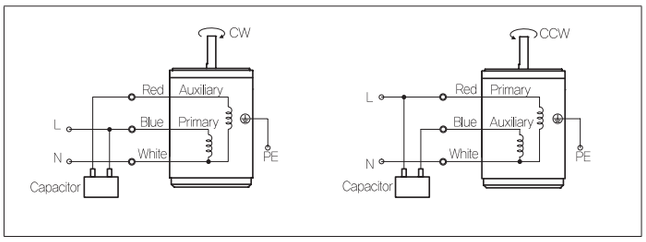
● KEY SPEC



Speed-Torque Characteristics



Connection Diagrams



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) Change the direction of single phase motor rotation only after bringing the motor to a stop.
If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction after some delay.

Torque Motor 30W(□90mm)

30W Torque Motor 30W(□90mm)

Motor Specification

Model 9TDG*-30F2□ : Gear Type Shaft 9TDD*-30F2: D-Cut Type Shaft 9TDK*-30F2: Key Type Shaft		Rating at Locked Rotor	Voltage V	Frequency Hz	Poles	Starting Torque kgfcm	Starting Torque N.m	At max. Output Power Output W	Speed r/min	Current A	Torque kgfcm	Torque N.m	Capacitor μF / VAC
Connector Type	Lead Wire Type												
9TD◇1(A)-30F2□-C	9TD◇1(A)-30F2□-L	5min.	1ø 110	60	4	6.07	0.607	30	900	1.54	3.25	0.325	20.0 / 250
		Cont.	1ø 60			1.86	0.186	10		0.92	1.08	0.108	
8TD◇2(D)-10□-C	9TD◇2(D)-30F2□-L	5min.	1ø 220	60	4	5.97	0.597	30		0.75	3.25	0.325	5.0 / 450
		Cont.	1ø 140			2.49	0.249	10		0.51	1.08	0.108	
9TD◇2(D)-30F2□-C	9TD◇E-30F2□-L	5min.	1ø 220~240	50	4	5.89	0.589	30	750	0.63	3.90	0.390	5.0 / 450
		Cont.	1ø 140			2.57	0.257	10		0.43	1.30	0.130	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

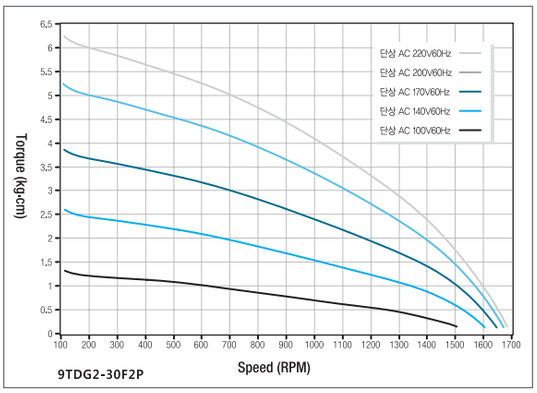
Motor Model	Gearbox Model	Gear Ratio		2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
9TDG*-30F2P	9PBK□BH 9PFK□BH	5min.	kgfcm	5.3	7.9	9.5	13.1	15.8	19.7	23.7	26.3	29.6	35.6	42.7	47.4	53.6	64.3	77.1	85.7	107.1	128.6	143.7	172.4	191.6	200.0	200.0	200.0	200.0
			N.m	0.52	0.77	0.93	1.29	1.55	1.93	2.32	2.58	2.90	3.48	4.18	4.65	5.25	6.30	7.56	8.40	10.50	12.60	14.08	16.90	18.77	19.60	19.60	19.60	19.60
		Cont.	kgfcm	1.8	2.6	3.2	4.4	5.3	6.6	7.9	8.8	9.9	11.9	14.2	15.8	17.9	21.4	25.7	28.6	35.7	42.9	47.9	57.5	63.9	76.6	95.8	114.9	127.7
			N.m	0.17	0.26	0.31	0.43	0.52	0.64	0.77	0.86	0.97	1.16	1.39	1.55	1.75	2.10	2.52	2.80	3.50	4.20	4.69	5.63	6.26	7.51	9.39	11.26	12.51
9TDG*-30F2H	9HBK□BH 9HFK□BH	5min.	kgfcm	–	7.9	9.5	13.1	15.8	19.7	23.7	26.3	29.6	35.6	42.7	47.4	53.6	64.3	77.1	85.7	107.1	128.6	143.7	172.4	191.6	229.9	287.3	300.0	300.0
			N.m		0.77	0.93	1.29	1.55	1.93	2.32	2.58	2.90	3.48	4.18	4.65	5.25	6.30	7.56	8.40	10.50	12.60	14.08	16.90	18.77	22.53	28.16	29.40	29.40
			kgfcm	–	2.6	3.2	4.4	5.3	6.6	7.9	8.8	9.9	11.9	14.2	15.8	17.9	21.4	25.7	28.6	35.7	42.9	47.9	57.5	63.9	76.6	95.8	114.9	127.7
			N.m		0.26	0.31	0.43	0.52	0.64	0.77	0.86	0.97	1.16	1.39	1.55	1.75	2.10	2.52	2.80	3.50	4.20	4.69	5.63	6.26	7.51	9.39	11.26	12.51

50Hz

Motor Model	Gearbox Model	Gear Ratio		2	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
9TDG*-30F2P	9PBK□BH 9PFK□BH	5min.	kgfcm	6.3	9.5	11.4	15.8	18.9	23.7	28.4	31.6	35.6	42.7	51.2	56.9	64.3	77.1	92.6	102.9	128.6	154.3	172.4	200.0	200.0	200.0	200.0	200.0	200.0
			N.m	0.62	0.93	1.11	1.55	1.86	2.32	2.78	3.09	3.48	4.18	5.02	5.57	6.30	7.56	9.07	10.08	12.60	15.12	16.90	19.60	19.60	19.60	19.60	19.60	19.60
		Cont.	kgfcm	2.1	3.2	3.8	5.3	6.3	7.9	9.5	10.5	11.9	14.2	17.1	19.0	21.4	25.7	30.9	34.3	42.9	51.4	57.5	69.0	76.6	91.9	114.9	137.9	153.2
			N.m	0.21	0.31	0.37	0.52	0.62	0.77	0.93	1.03	1.16	1.39	1.67	1.86	2.10	2.52	3.02	3.36	4.20	5.04	5.63	6.76	7.51	9.01	11.26	13.52	15.02
9TDG*-30F2H	9HBK□BH 9HFK□BH	5min.	kgfcm	–	9.5	11.4	15.8	18.9	23.7	28.4	31.6	35.6	42.7	51.2	56.9	64.3	77.1	92.6	102.9	128.6	154.3	172.4	206.9	229.9	275.8	300.0	300.0	300.0
			N.m		0.93	1.11	1.55	1.86	2.32	2.78	3.09	3.48	4.18	5.02	5.57	6.30	7.56	9.07	10.08	12.60	15.12	16.90	20.27	22.53	27.03	29.40	29.40	29.40
		Cont	kgfcm	–	3.2	3.8	5.3	6.3	7.9	9.5	10.5	11.9	14.2	17.1	19.0	21.4	25.7	30.9	34.3	42.9	51.4	57.5	69.0	76.6	91.9	114.9	137.9	153.2
			N.m		0.31	0.37	0.52	0.62	0.77	0.93	1.03	1.16	1.39	1.67	1.86	2.10	2.52	3.02	3.36	4.20	5.04	5.63	6.76	7.51	9.01	11.26	13.52	15.02

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
: a white background indicates the 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.

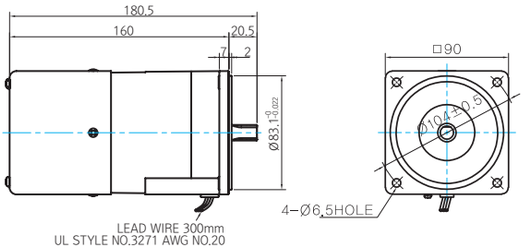
Speed-Torque Characteristics



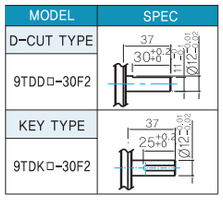
Dimensions

MOTOR ONLY

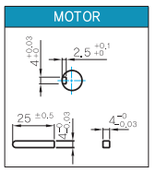
● MOTOR MODEL:
9TD□□-30F2 (POWERFUL FAN)



● MOTOR OUTPUT SHAFT

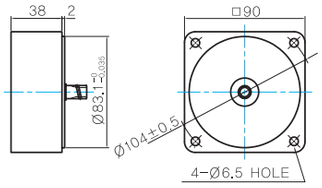
MODEL	SPEC
D-CUT TYPE	
9TDD□-30F2	
KEY TYPE	
9TDK□-30F2	

● KEY SPEC



INTER-DECIMAL GEARBOX

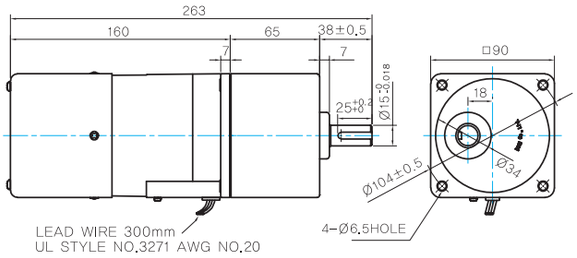
● MODEL: 9XD10□□



GEARED MOTOR

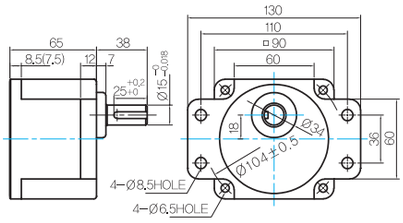
P TYPE GEARBOX

● MOTOR MODEL:
9TDG□-30F2P (POWERFUL FAN)

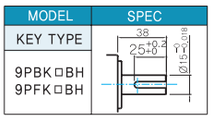


● GEARBOX MODEL:
9PBK□BH

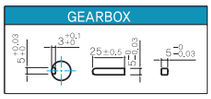
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

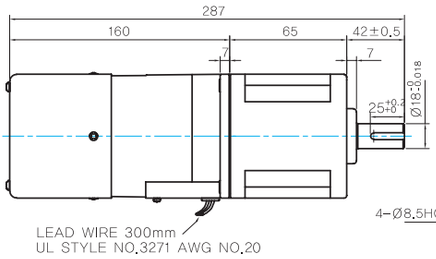
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

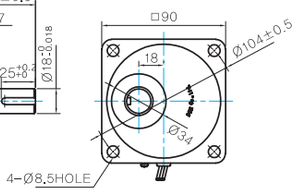


H TYPE GEARBOX

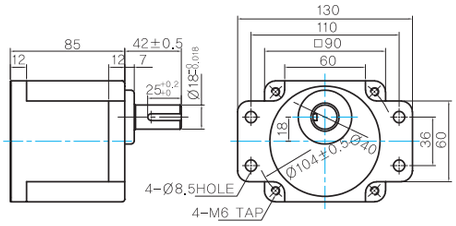
● MOTOR MODEL:
9TDG□-30F2H (POWERFUL FAN)



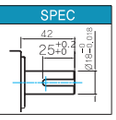
● GEARBOX MODEL:
9HBK□BH



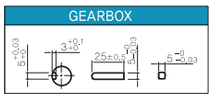
● GEARBOX MODEL:
9HFK□BH



● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC



WEIGHT

PART		WEIGHT(kg)
MOTOR		3.05
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9XD10○○	0.60

*The output flange and shaft are sold separately.

B AC Motors

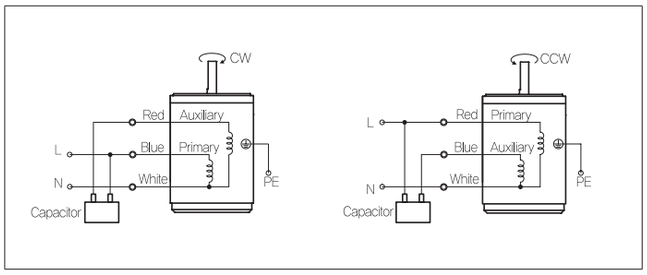
Torque Motor 30W(□90mm)

Motor Images

9TDD□-30F2	9TDG□-30F2P+9PBK□BH	9TDG□-30F2P+9PFK□BH	9TDG□-30F2H+9HBK□BH

9TDG□-30F2H+9HFK□BH

Connection Diagrams



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) Change the direction of single phase motor rotation only after bringing the motor to a stop.
If an attempt is made to change the direction of rotation while the motor is rotating,
the motor may ignore the reversing command or change its direction after some delay.

40W Torque Motor 40W(□90mm)

Motor Specification

Model 9TDG*-40F2□: Gear Type Shaft 9TDD*-40F2: D-Cut Type Shaft 9TDK*-40F2: Key Type Shaft		Rating at Locked Rotor	Voltage V	Frequency Hz	Poles	Starting Torque		At max. Output Power					Capacitor μF / VAC
Connector Type	Lead Wire Type					kgfcm	N.m	Output W	Speed r/min	Current A	Torque kgfcm	Torque N.m	
9TD◇1(A)-40F2□-C	9TD◇1(A)-40F2□-L	5min.	1ø 110	60	4	8.00	0.800	40	900	2.00	4.33	0.433	25.0 / 250
		Cont.	1ø 60			2.42	0.242	13		1.20	1.41	0.141	
9TD◇2(D)-40F2□-C	9TD◇2(D)-40F2□-L	5min.	1ø 220	60	4	7.72	0.772	40		1.01	4.33	0.433	6.5 / 450
		Cont.	1ø 140			3.35	0.335	13		0.66	1.41	0.141	
9TD◇E-40F2□-C	9TD◇E-40F2□-L	5min.	1ø 220~240	50	4	7.27	0.727	40	750	0.88	5.19	0.519	6.5 / 450
		Cont.	1ø 140			3.29	0.329	13		0.55	1.69	0.169	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

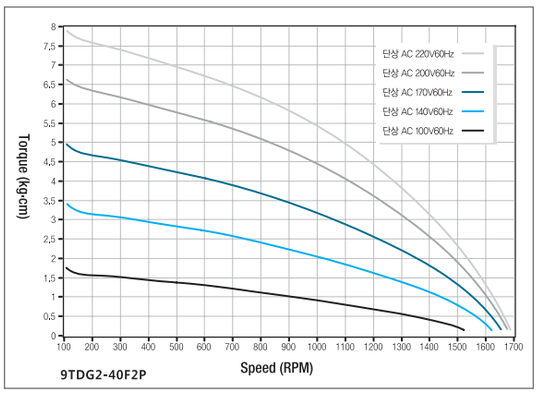
Motor Model	Gearbox Model	Gear Ratio		2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
9TDG*-40F2P	9PBK□BH 9PFK□BH	5min.	kgfcm	7.0	10.5	12.6	17.5	21.0	26.3	31.6	35.1	39.5	47.4	56.9	63.2	71.4	85.7	102.9	114.3	142.9	171.4	191.6	200.0	200.0	200.0	200.0	200.0	200.0
			N.m	0.69	1.03	1.24	1.72	2.06	2.58	3.09	3.44	3.87	4.65	5.57	6.19	7.00	8.40	10.08	11.20	14.00	16.80	18.77	19.60	19.60	19.60	19.60	19.60	19.60
		Cont.	kgfcm	2.3	3.4	4.1	5.7	6.8	8.5	10.3	11.4	12.8	15.4	18.5	20.5	23.2	27.9	33.4	37.1	46.4	55.7	62.3	74.7	83.0	99.6	124.5	149.4	166.0
			N.m	0.22	0.34	0.40	0.56	0.67	0.84	1.01	1.12	1.26	1.51	1.81	2.01	2.27	2.73	3.28	3.64	4.55	5.46	6.10	7.32	8.13	9.76	12.20	14.64	16.27
9TDG*-40F2H	9HBK□BH 9HFK□BH	5min.	kgfcm	–	10.5	12.6	17.5	21.0	26.3	31.6	35.1	39.5	47.4	56.9	63.2	71.4	85.7	102.9	114.3	142.9	171.4	191.6	229.9	255.4	300.0	300.0	300.0	300.0
			N.m		1.03	1.24	1.72	2.06	2.58	3.09	3.44	3.87	4.65	5.57	6.19	7.00	8.40	10.08	11.20	14.00	16.80	18.77	22.53	25.03	29.40	29.40	29.40	29.40
		Cont.	kgfcm	–	3.4	4.1	5.7	6.8	8.5	10.3	11.4	12.8	15.4	18.5	20.5	23.2	27.9	33.4	37.1	46.4	55.7	62.3	74.7	83.0	99.6	124.5	149.4	166.0
			N.m		0.34	0.40	0.56	0.67	0.84	1.01	1.12	1.26	1.51	1.81	2.01	2.27	2.73	3.28	3.64	4.55	5.46	6.10	7.32	8.13	9.76	12.20	14.64	16.27

50Hz

Motor Model	Gearbox Model	Gear Ratio		2	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
9TDG*-40F2P	9PBK□BH 9PFK□BH	5min.	kgfcm	8.4	12.6	15.1	21.0	25.2	31.6	37.9	42.1	47.4	56.9	68.3	75.8	85.7	102.9	123.4	137.1	171.4	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
			N.m	0.82	1.24	1.48	2.06	2.47	3.09	3.71	4.12	4.65	5.57	6.69	7.43	8.40	10.08	12.10	13.44	16.80	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
		Cont.	kgfcm	2.7	4.1	4.9	6.8	8.2	10.3	12.3	13.7	15.4	18.5	22.2	24.6	27.9	33.4	40.1	44.6	55.7	66.9	74.7	89.6	99.6	119.5	149.4	179.3	199.2
			N.m	0.27	0.40	0.48	0.67	0.80	1.01	1.21	1.34	1.51	1.81	2.17	2.42	2.73	3.28	3.93	4.37	5.46	6.55	7.32	8.79	9.76	11.71	14.64	17.57	19.52
9TDG*-40F2H	9HBK□BH 9HFK□BH	5min.	kgfcm	–	12.6	15.1	21.0	25.2	31.6	37.9	42.1	47.4	56.9	68.3	75.8	85.7	102.9	123.4	137.1	171.4	205.7	229.9	275.8	300.0	300.0	300.0	300.0	300.0
			N.m		1.24	1.48	2.06	2.47	3.09	3.71	4.12	4.65	5.57	6.69	7.43	8.40	10.08	12.10	13.44	16.80	20.16	22.53	27.03	29.40	29.40	29.40	29.40	29.40
		Cont.	kgfcm	–	4.1	4.9	6.8	8.2	10.3	12.3	13.7	15.4	18.5	22.2	24.6	27.9	33.4	40.1	44.6	55.7	66.9	74.7	89.6	99.6	119.5	149.4	179.3	199.2
			N.m		0.40	0.48	0.67	0.80	1.01	1.21	1.34	1.51	1.81	2.17	2.42	2.73	3.28	3.93	4.37	5.46	6.55	7.32	8.79	9.76	11.71	14.64	17.57	19.52

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the 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.

Speed-Torque Characteristics



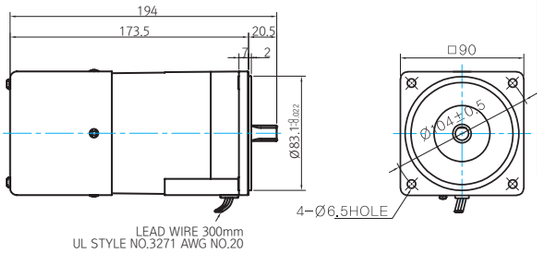
B AC Motors

Torque Motor 40W(□90mm)

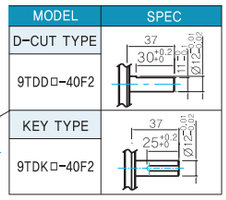
Dimensions

MOTOR ONLY

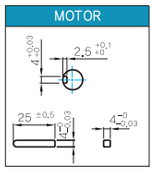
● MOTOR MODEL:
9TD□□-40F2 (POWERFUL FAN)



● MOTOR OUTPUT SHAFT

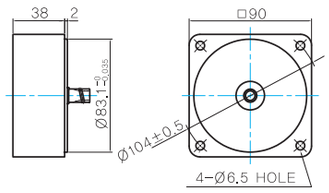
MODEL	SPEC
D-CUT TYPE	
9TDD□-40F2	
KEY TYPE	
9TDK□-40F2	

● KEY SPEC



INTER-DECIMAL GEARBOX

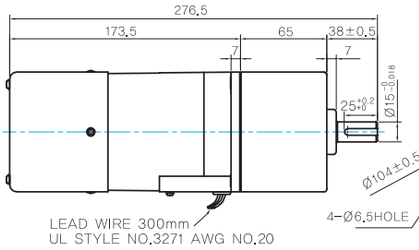
● MODEL: 9XD10□□



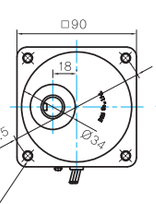
GEARED MOTOR

P TYPE GEARBOX

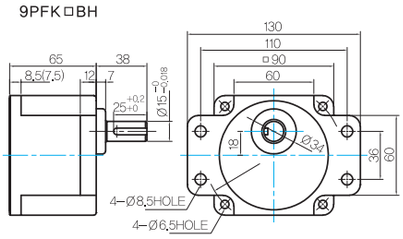
● MOTOR MODEL:
9TDG□-40F2P (POWERFUL FAN)



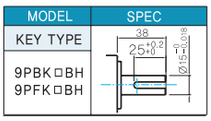
● GEARBOX MODEL:
9PBK□BH



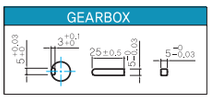
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

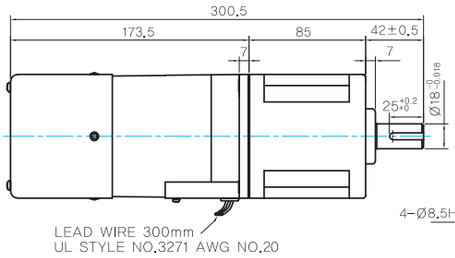
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

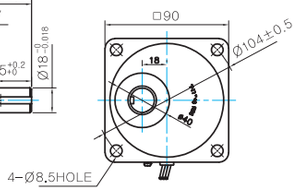


H TYPE GEARBOX

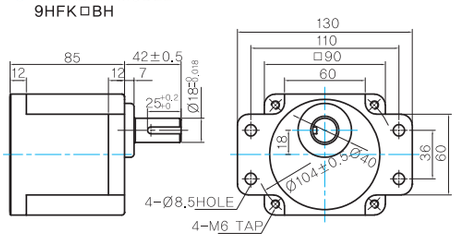
● MOTOR MODEL:
9TDG□-40F2H (POWERFUL FAN)



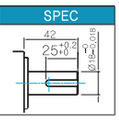
● GEARBOX MODEL:
9HBK□BH



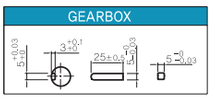
● GEARBOX MODEL:
9HFK□BH



● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC



WEIGHT

PART		WEIGHT(kg)
MOTOR		3.40
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9XD10○○	0.60

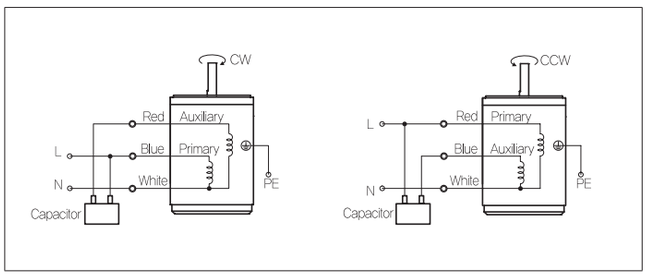
*The output flange and shaft are sold separately.

Motor Images

9TDD□-40F2	9TDG□-40F2P+9PBK□BH	9TDG□-40F2P+9PFK□BH	9TDG□-40F2H+9HBK□BH

9TDG□-40F2H+9HFK□BH

Connection Diagrams



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) Change the direction of single phase motor rotation only after bringing the motor to a stop.
If an attempt is made to change the direction of rotation while the motor is rotating,
the motor may ignore the reversing command or change its direction after some delay.

Torque Motor 60W(□90mm)

60W Torque Motor 60W(□90mm)

Motor Specification

Model 9TDG*-60F2□: Gear Type Shaft 9TDD*-60F2: D-Cut Type Shaft 9TDK*-60F2: Key Type Shaft		Rating at Locked Rotor	Voltage V	Frequency Hz	Poles	Starting Torque kgfcm	Starting Torque N.m	At max. Output Power Output W	Speed r/min	Current A	Torque kgfcm	Torque N.m	Capacitor μF / VAC
Connector Type	Lead Wire Type												
9TD◇1(A)-60F2□-C	9TD◇1(A)-60F2□-L	5min.	1ø 110	60	4	8.80	0.880	60	900	2.50	6.49	0.649	30.0 / 250
		Cont.	1ø 70			3.60	0.360	20		1.50	2.16	0.216	
9TD◇2(D)-60F2□-C	9TD◇2(D)-60F2□-L	5min.	1ø 220	60	4	9.70	0.970	60		1.20	6.49	0.649	8.0 / 450
		Cont.	1ø 140			4.10	0.410	20		0.80	2.16	0.216	
9TD◇E-60F2□-C	9TD◇E-60F2□-L	5min.	1ø 220~240	50	4	9.50	0.950	60	750	1.10	7.79	0.779	8.0 / 450
		Cont.	1ø 140			4.00	0.400	20		0.70	2.60	0.260	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

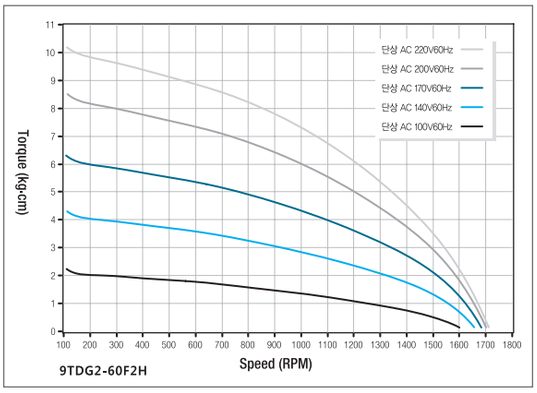
Motor Model	Gearbox Model	Gear Ratio		2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
9TDG*-60F2P	9PBK□BH 9PFK□BH	5min.	kgfcm	14.3	21.4	25.7	35.6	42.8	53.5	64.2	71.3	80.3	96.4	115.6	128.5	145.2	174.2	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
			N.m	1.40	2.10	2.51	3.49	4.19	5.24	6.29	6.99	7.87	9.44	11.33	12.59	14.23	17.08	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
		Cont.	kgfcm	5.8	8.7	10.5	14.6	17.5	21.9	26.2	29.2	32.9	39.4	47.3	52.6	59.4	71.3	85.5	95.0	118.8	142.6	159.3	191.2	200.0	200.0	200.0	200.0	200.0
			N.m	0.57	0.86	1.03	1.43	1.71	2.14	2.57	2.86	3.22	3.86	4.64	5.15	5.82	6.99	8.38	9.31	11.64	13.97	15.61	18.73	19.60	19.60	19.60	19.60	19.60
9TDG*-60F2H	9HBK□BH 9HFK□BH	5min.	kgfcm	–	21.4	25.7	35.6	42.8	53.5	64.2	71.3	80.3	96.4	115.6	128.5	145.2	174.2	209.1	232.3	290.4	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
			N.m		2.10	2.51	3.49	4.19	5.24	6.29	6.99	7.87	9.44	11.33	12.59	14.23	17.08	20.49	22.77	28.46	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
		Cont	kgfcm	–	8.7	10.5	14.6	17.5	21.9	26.2	29.2	32.9	39.4	47.3	52.6	59.4	71.3	85.5	95.0	118.8	142.6	159.3	191.2	212.4	254.9	300.0	300.0	300.0
			N.m		0.86	1.03	1.43	1.71	2.14	2.57	2.86	3.22	3.86	4.64	5.15	5.82	6.99	8.38	9.31	11.64	13.97	15.61	18.73	20.82	24.98	29.40	29.40	29.40

50Hz

Motor Model	Gearbox Model	Gear Ratio		2	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
9TDG*-60F2P	9PBK□BH 9PFK□BH	5min.	kgfcm	15.4	23.1	27.7	38.5	46.2	57.7	69.3	77.0	86.7	104.0	124.8	138.7	156.8	188.1	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
			N.m	1.51	2.26	2.71	3.77	4.52	5.66	6.79	7.54	8.50	10.19	12.23	13.59	15.36	18.43	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
		Cont.	kgfcm	6.5	9.7	11.7	16.2	19.4	24.3	29.2	32.4	36.5	43.8	52.6	58.4	66.0	79.2	95.0	105.6	132.0	158.4	177.0	200.0	200.0	200.0	200.0	200.0	200.0
			N.m	0.64	0.95	1.14	1.59	1.91	2.38	2.86	3.18	3.58	4.29	5.15	5.72	6.47	7.76	9.31	10.35	12.94	15.52	17.35	19.60	19.60	19.60	19.60	19.60	19.60
9TDG*-60F2H	9HBK□BH 9HFK□BH	5min.	kgfcm	–	23.1	27.7	38.5	46.2	57.7	69.3	77.0	86.7	104.0	124.8	138.7	156.8	188.1	225.7	250.8	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
			N.m		2.26	2.71	3.77	4.52	5.66	6.79	7.54	8.50	10.19	12.23	13.59	15.36	18.43	22.12	24.58	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
		Cont	kgfcm	–	9.7	11.7	16.2	19.4	24.3	29.2	32.4	36.5	43.8	52.6	58.4	66.0	79.2	95.0	105.6	132.0	158.4	177.0	212.4	236.0	283.2	300.0	300.0	300.0
			N.m		0.95	1.14	1.59	1.91	2.38	2.86	3.18	3.58	4.29	5.15	5.72	6.47	7.76	9.31	10.35	12.94	15.52	17.35	20.82	23.13	27.75	29.40	29.40	29.40

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the 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.

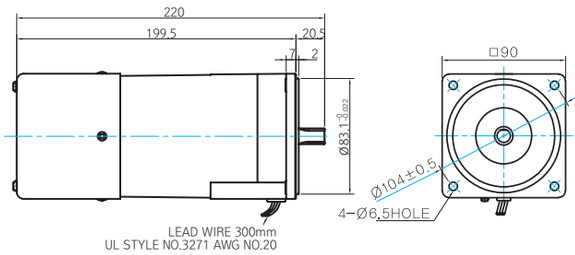
Speed-Torque Characteristics



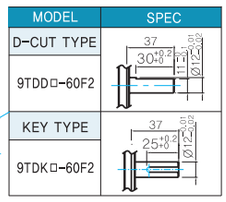
Dimensions

MOTOR ONLY

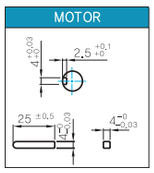
● MOTOR MODEL:
9TD□□-60F2 (POWERFUL FAN)



● MOTOR OUTPUT SHAFT

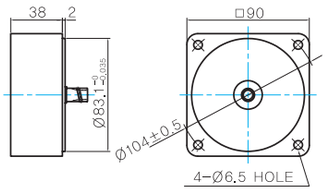
MODEL	SPEC
D-CUT TYPE	
9TDD□-60F2	
KEY TYPE	
9TDK□-60F2	

● KEY SPEC

MOTOR


INTER-DECIMAL GEARBOX

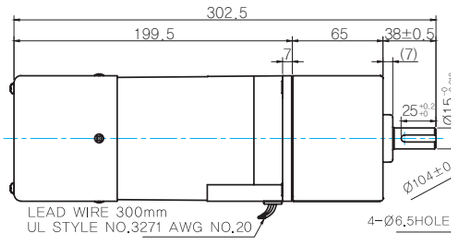
● MODEL: 9XD10□□



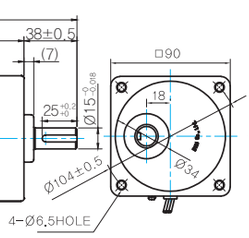
GEARED MOTOR

P TYPE GEARBOX

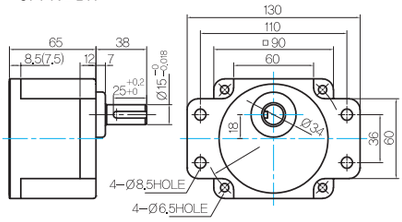
● MOTOR MODEL:
9TDG□-60F2P (POWERFUL FAN)



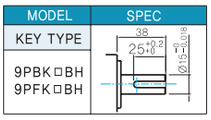
● GEARBOX MODEL:
9PBK□BH



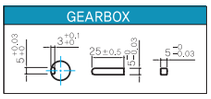
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

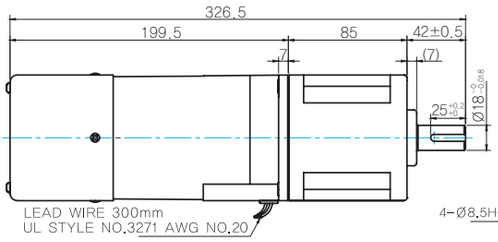
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

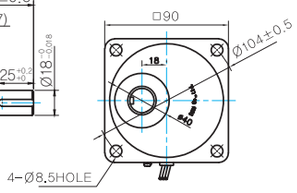
GEARBOX


H TYPE GEARBOX

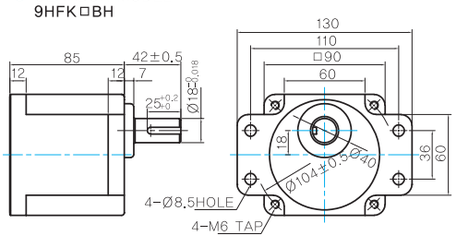
● MOTOR MODEL:
9TDG□-60F2H (POWERFUL FAN)



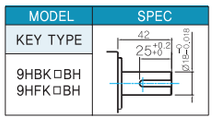
● GEARBOX MODEL:
9HBK□BH



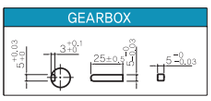
● GEARBOX MODEL:
9HFK□BH



● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC

GEARBOX


WEIGHT

PART		WEIGHT(kg)
MOTOR		4.15
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9XD10○○	0.60

*The output flange and shaft are sold separately.

B AC Motors

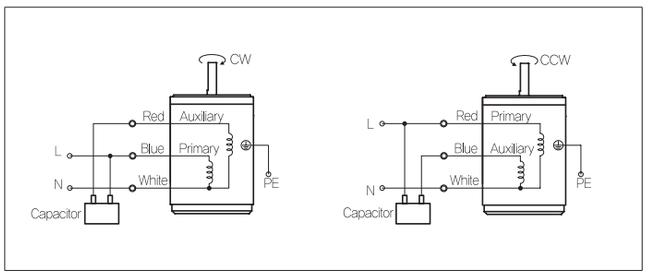
Torque Motor 60W(□90mm)

Motor Images

9TDD□-60F2	9TDG□-60F2P+9PBK□BH	9TDG□-60F2P+9PFK□BH	9TDG□-60F2H+9HBK□BH

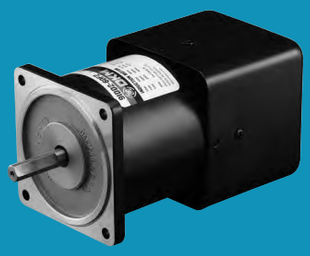
9TDG□-60F2H+9HFK□BH

Connection Diagrams



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) Change the direction of single phase motor rotation only after bringing the motor to a stop.
If an attempt is made to change the direction of rotation while the motor is rotating,
the motor may ignore the reversing command or change its direction after some delay.

Speed Control System



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B AC Motors

Outline of AC Speed Control System

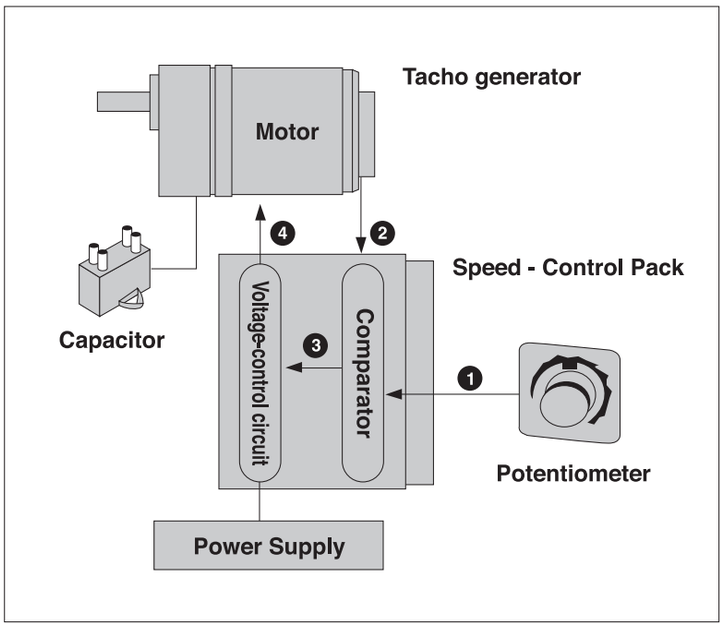
Features

- DKM Motor allows you easily to set and adjust the motor speed. There are five kinds of AC speed controller as shown below. Select the best system depending upon your application..

FX3000	DX3000	DSA	DSKM	
– Digital Speed Display – Speed, Torque Control – Simple Dial – Gear Ratio Setting – Acceleration Time Setting	– RS485 Communication Control – PLC I/O Control – Speed, Torque Control – Gear Ratio Setting – Acceleration Time Setting	– Analog Type – Connect the motor and control unit together using the connetcor – built-in capacitor	– Socket Type Controller – Multi-Stage Speed Setting (Install external volume separately) – Electric Brake Function (Install resistance coil separately)	

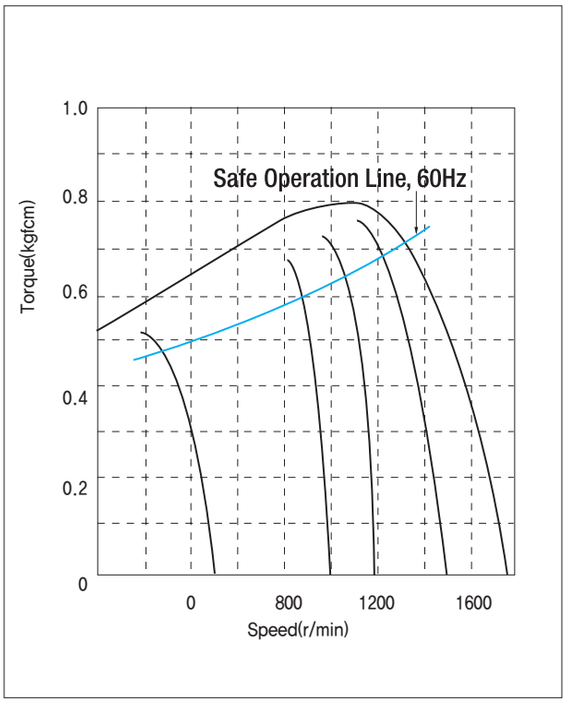
Speed Control Methods of Speed Control System

① Set the speed setting voltage with potentiometer.
② Tacho generrator detects the speed signal voltage.
③ The comparator outputs the difference between the speed setting voltage and speed signal voltage.
④ A voltage determined by the output from the comparator is supplied to the motor so that it will reach the set speed.



Speed-Torque Characteristics of Speed Control System and Safe Operation Line

- The speed-torque characteristics line of all AC speed control motors is shown in the graph below. Each set speed changes slightly according to the change in load torque.



Input power to the speed control motor depends on the load and speed. The greater the load and the lower the speed, the greater the increase in motor temperature. In the speed-torque characteristics graph, the line is referred to as the safe operation line, while the area below the line is called the continuous operation area. The safe operation line, measured according to the motor temperature, indicates its operational limit for continuous usage with the temperature. Whether the motor can be operated at a specific torque and speed is determined by measuring the temperature of the motor case. In general, if the temperature of the motor case is below 90℃, continuous operation is possible considering the insulation class of motor coil winding. But the motor life could be extended with lower temperatures. So it is recommended that the motor be used under conditions that keep the motor temperature low. DKM has two kinds of cooling fans; General Fan(F Type) and Powerful Fan(F2 Type). The general fan is mounted on the motor shaft and its speed depends on the motor shaft speed.
So in the slow speed of the motor, there is a very weak cooling effect. In the application where motor speeds could be changed from low speed (below 1,000r/min) to high speed like a speed control motor, a powerful fan is needed so that the cooling effect keeps constant regardless of the motor speed. In the case of speed control motors powerful fan(F2 type) is used for them. In a special application or by user's requests, a general fan could be used for speed control motors.

- Do not exceed 'Max. Permissible Torque at Output Shaft of Gearbox'.
  It may damage the gearbox and shorten its life to operate the machine with the gearbox over 'Max. Permissible Torque at Output Shaft of Gearbox'.

General Specifications

Item	Specifications
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 gearbox 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

FX3000 Speed Controller

Special Features

- **Easy, Simple Wiring**
  Possible to control the speed and torque of the motor simply by connecting a motor and control unit with connector and inputting the AC terminal to the power source.

- **Easy Wiring and Maintenance**
  The screwless connector is used for FX3000.

- **Efficient and Convenient Operation**
  Possible to control speed and torque easily with the front panel dial.

- **Digital Display**
  Display the current rotation speed(r/min) and torque(%).

- **Various Functions**
  Possible to operate various functions by setting the parameter.

General Specifications

Model	FX3000-□□	
Rated Voltage	1Ø AC 220~240V 50/60Hz ±10 %	
Allowable Current	Below 6 A	
Control Function	Speed Control, Torque Control	
Control System	Phase Control	
Operating Range	Speed Control	50Hz : 90~1400r/min 60Hz : 90~1700r/min
	Torque Control	0 ~ 100 %
Speed Control	Internal volume	
Speed Variation	±5%(Standard Value)	
Motor Output	3W~180W	
Ambient Temperature	-10C°~ 55C°	
Ambient Humidity	35 ~ 85%RH (Without condensation)	
Insulation Resistance	Over DC 500V 100MΩ (between power supply and external terminal)	
Dielectric Strength	AC 1500V 1minute (between power supply and external terminal)	

CONTROLLER CODING SYSTEM

FX3000 — 060 S

Controller Model

OUTPUT

003: 3W	**030**: 30W
006: 6W	**040**: 40W
010: 10W	**060**: 60W
015: 15W	**090**: 90W
020: 20W	**120**: 120W
025: 25W	**180**: 180W

TYPE

S: Speed Control Motor
T: Torque Control Motor

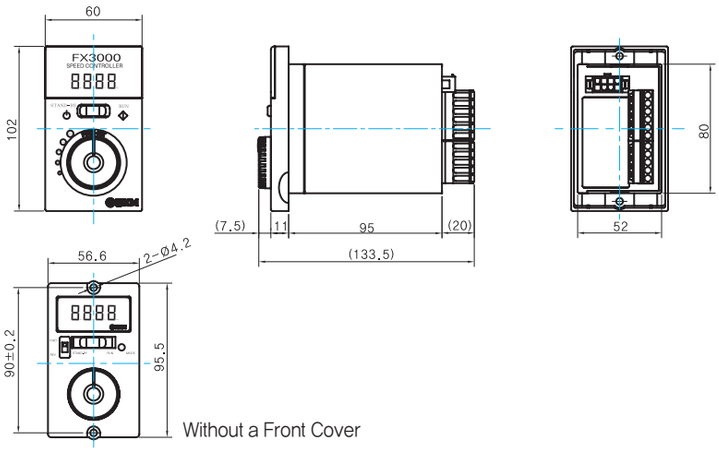
*Initial setting mode is speed control.
Please change to '1' (torque motor) on parameter 'Pr04'(control mode), if using torque motor.
Regarding changing method, please refer to 'Parameter Setting Procedure'.

Combination Table

Item	Output	Motor Model	Controller Model
SPEED MOTOR	6W	6SD□□-6□	FX3000-006 S
		7SD□□-6□	
	10W	7SD□□-10□	FX3000-010 S
	15W	7SD□□-15□	FX3000-015 S
		8SD□□-15□	
	25W	8SD□□-25□	FX3000-025 S
	40W	9SD□□-40□	FX3000-040 S
	60W	9SD□□-60F2□	FX3000-060 S
	90W	9SD□□-90F2□	FX3000-090 S
	120W	9SD□□-120F2□	FX3000-120 S
	180W	9SD□□-180F2□	FX3000-180 S

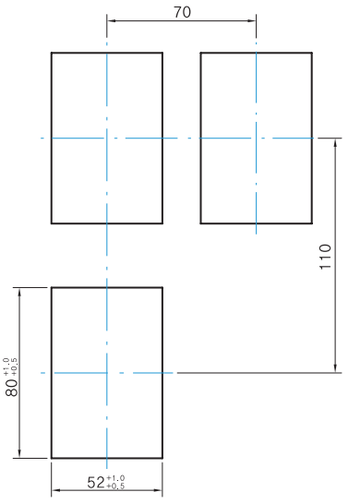
Item	Output	Motor Model	Controller Model
TORQUE MOTOR	3W	6TD□□-3□	FX3000-003 T
	6W	7TD□□-6□	FX3000-006 T
	10W	8TD□□-10□	FX3000-010 T
	20W	9TD□□-20F2□	FX3000-020 T
	30W	9TD□□-30F2□	FX3000-030 T
	40W	9TD□□-40F2□	FX3000-040 T
	60W	9TD□□-60F2□	FX3000-060 T

Dimensions



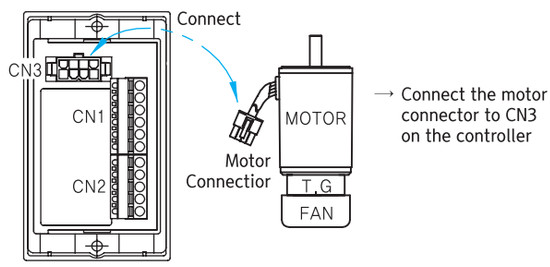
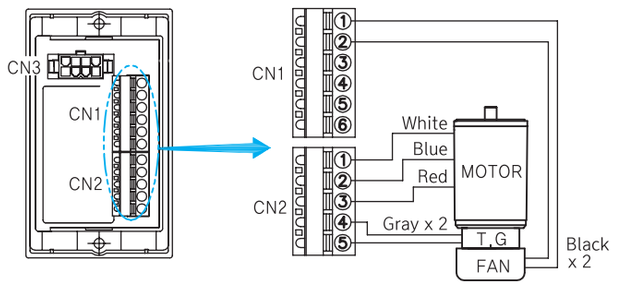
Without a Front Cover

Mounting Panel Dimension



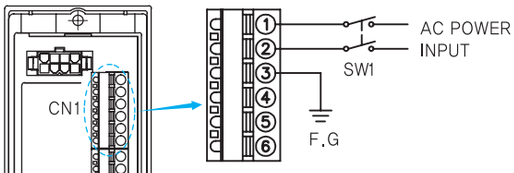
Wiring Diagram

Speed Control Motor or Torque Motor

Connector Type	Lead wire Type
	

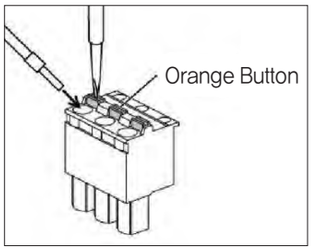
※ Depending on the motor type and specification, there can be no powerful fan cable (Blackx2), T.G cable (Greyx2).
※ You could use FX3000 with motors and gearboxes from other brand.

Controller Power Connection



→ Connect AC Power to #1 and #2 on terminal CN1.
→ Connect Earth to #3 on terminal CN1.

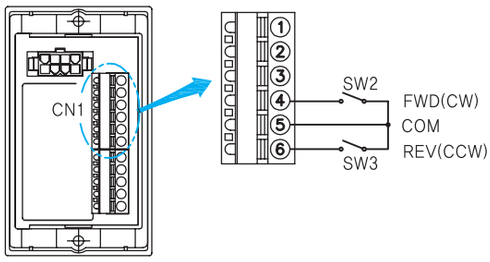
SW1	Above AC 125V or 250V 5A



※ Lead wire
- AWG18~14(0.75~2.0 ㎟)

■ Lead wire connection
→ Input the lead wire while pressing the orange button with screw driver.

Uni-directioinal operation



* In case of RUN/ STOP operation externally, please make sure that the switch position should be on STAND-BY and connect #4, #5, and #6 on terminal CN1.

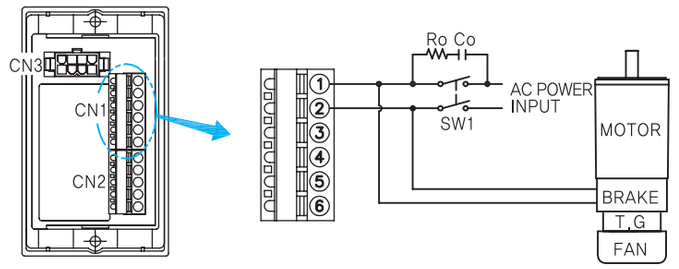
SW2	SW3	Motor Shaft
ON	OFF	Rotate to FWD
OFF	ON	Rotate to REV
OFF	OFF	STOP

※ Front switch should be at STAND-BY position when operating by external signal.(Connect only for external RUN/STOP)

Speed Control Brake Motor

– Please refer to the wiring diagram below which is the wiring diagram of Speed Control Brake Motor, and the other motor's wiring diagrams are the same as the Speed Control Motor or Torque Motor.

Motor Connector or Lead Wire

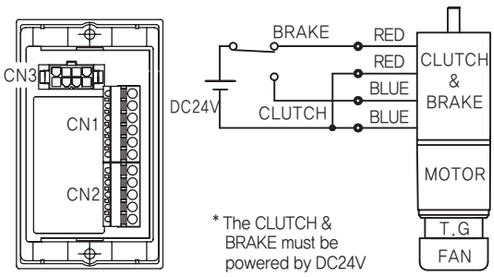


SW1	AC 125V or 250V Over 5A
Ro Co	Ro = 5~200Ω(Over 1/4W) Co = 0.1 ~0.2uF (AC 200 or 400WV)

* Ro and Co indicate CR circuit for surge suppression.

Speed Control Clutch & Brake Motor

Motor Connector or Lead Wire Connection System



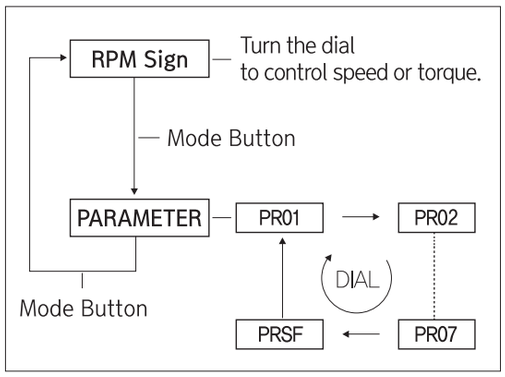
– Please refer to the wiring diagram which is the wiring diagram of the Clutch & Brake, and the wiring diagram for the others is the same as the 'Speed Control Motor or Torque Motor'.

Parameter Contents

Parameter NO.	Parameter Display	Function	Range	Standard Value	Remark
1	Pr01	Acceleration Time	0~15.0	0.1	Time(second) to reach the set speed
2	Pr02	Rotation Direction	0,1	0	0 : Clockwise 1 : Counterclockwise
3	Pr03	Gear Ratio	1~999	1.0	Input gear ratio
4	Pr04	Control Mode	0,1	0	0: Speed Control 1: Torque Control
5	Pr05	P Gain	0~255	100	
6	Pr06	I Gain	0~255	50	
7	Pr07	Parameter Reset	–	0	Reset when pressing and holding the SET button
SF	PrSF	Software Version	–	–	Display the software version

* Speed Control P, I gain
– Parameter which determines responsibility of speed control.
– Vibration and hunting may occur if the value is too large.

Product Formation



※ Press the dial(SET button) to enter the parameter data.
※ Press and hold the dial(SET button) to change the parameter data.

DX3000 Speed Controller

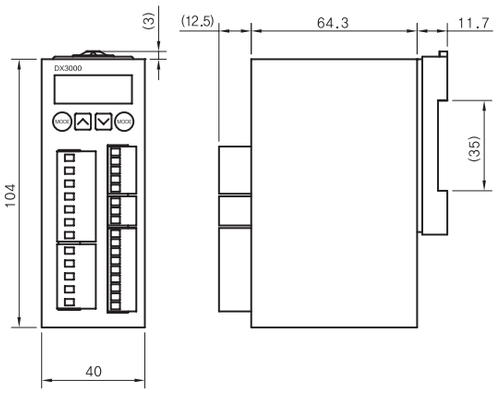
Features

- **RS485 Communication**
  Possible to connect up to 255 devices with Modbus Communication Protocol.
- **PLC I/O Control**
  Control the system by PLC I/O (No Need Relay)
- **Easy Wiring and Maintenance**
  Easy installation and detachment with connector (Easy maintenance)
  Simple installation in DIN rail
- **Digital Display**
  Display the current rotation speed(r/min) and torque(%) on the screen. Possible to connect a external touch screen and adjust speed.
- **Various Parameter Function**
  Possible to operate various functions by setting the parameter.

General Specifications

Model			DX3000
General Specifi cations	Rated Voltage	Motor Power	AC 220~240V 50Hz / 60Hz ±10%
		Control Power	DC 24V ±10%
	Rated Current [A]		4
	Max. Current [A]		6
	Control Function		Speed Control, Torque Control
	Control System		Phase Control
	Dimension [mm]		40(W) × 104(H) × 65(D)
	Speed Control Range		50Hz : 100 ~ 1460 r/min 60Hz : 100 ~ 1760 r/min
	Torque Control Range		0 ~ 100% (Maximum Torque)
	Feedback Sensor		Tacho - 12 ppr
	Ambient Temperature		-10 ℃ ~ 55 ℃
Input & Output specifi cations	Sequence Input		Forward, Reverse, Alarm reset, Velocity select
	Sequence Output		Speed pulse out, Alarm out
Built-in functions	Protection Function		Parameter error, AC low voltage alarm, EEPROM
	Condition Mark		4 Digit Display (7-Segment)
Communication Mode			Serial Communication (RS485 - MODBUS RTU)

Dimensions



RS 485 Communication

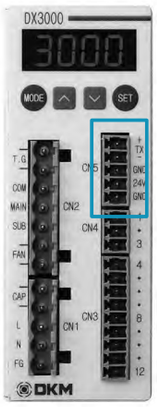
■ Communication Mode

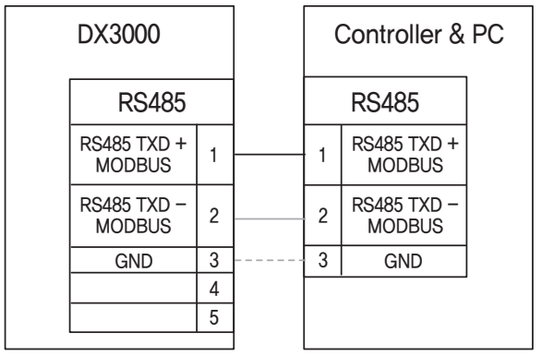
→ MODBUS RTU Slave Mode

■ Register Support

→ 0x03 (Read Holding Registers)
→ 0x04 (Read Input Registers)
→ 0x06 (Write Single Registers)
→ 0x03 (Read Holding Registers)

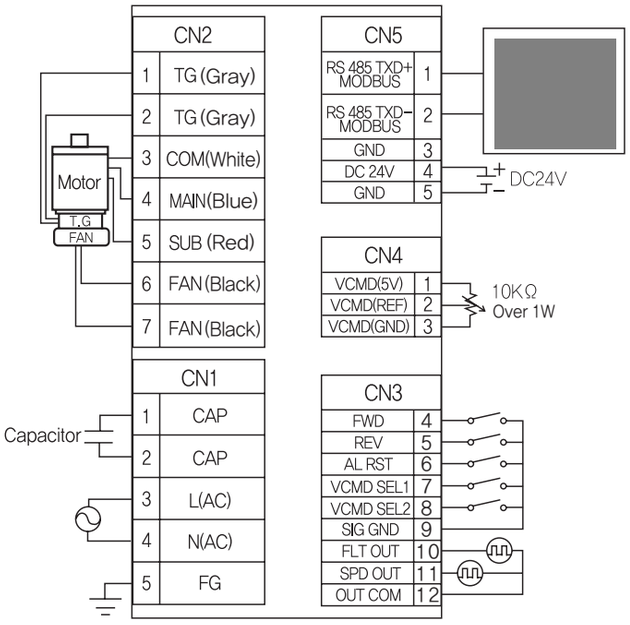
■ Communication Connection Diagram





– When connecting the communication GND, please connect GND of Controller & PC to PIN No. 3 of CN5.
– Please visit our website to download communication manual.

Controller Connection Diagram



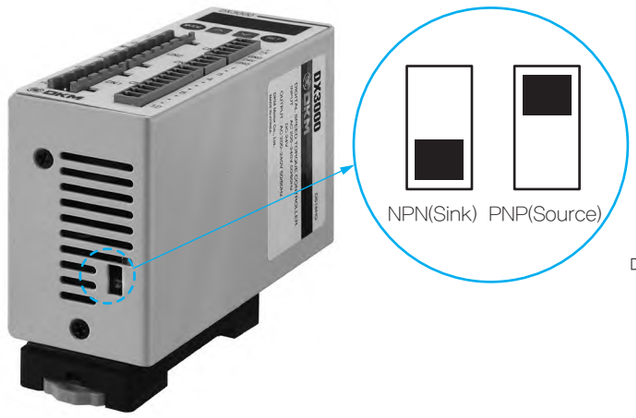
Function of CN4 Connector

NO.	Name	Description	Remark
1	VCMD V	External speed command potentiometer + voltage output	5V Output
2	VCMD Vref	External speed directive value input	Voltage input
3	VCMD GND	Connect to external speed directive GND	V GND

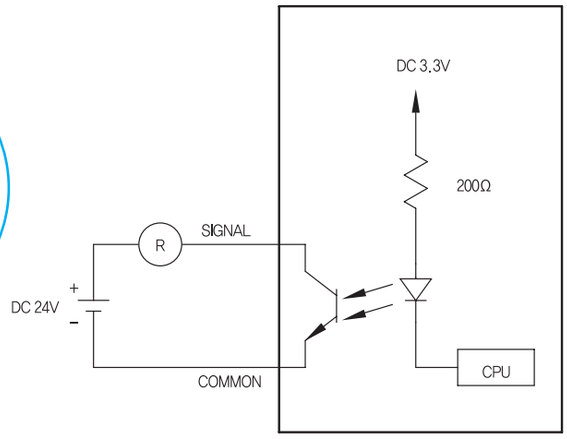
Function of CN3 Connector

NO.	Name	Description	Remark
4	FORWARD RUN	Forward operation switch	Input Signal
5	REVERSE RUN	Reverse operation switch	Input Signal
6	ALARM RESET	Alarm reset switch	Input Signal
7	SPEED SELECT1	Input select switch between internal and external input * Select operation mode with parameter No.7 * Internal Speed: Parameter No.30~No.32 * External Speed: Input external variable resistance * Internal Torque: Parameter No.33~No.35 * External Torque: Input external variable resistance	Input Signal
8	SPEED SELECT2		
9	SIGNAL COMMON	Motor switch input COMMON	COMMON
10	FAULT OUT	Output controller status * Change output contact (A or B) according to parameter No.10	Output Signal
11	SPEED OUT	Motor operating speed output * 12 Pulse output per a rotation of the motor	Output Signal
12	OUT COMMON	Output Contact Common	COMMON

I/O Signal Circuit

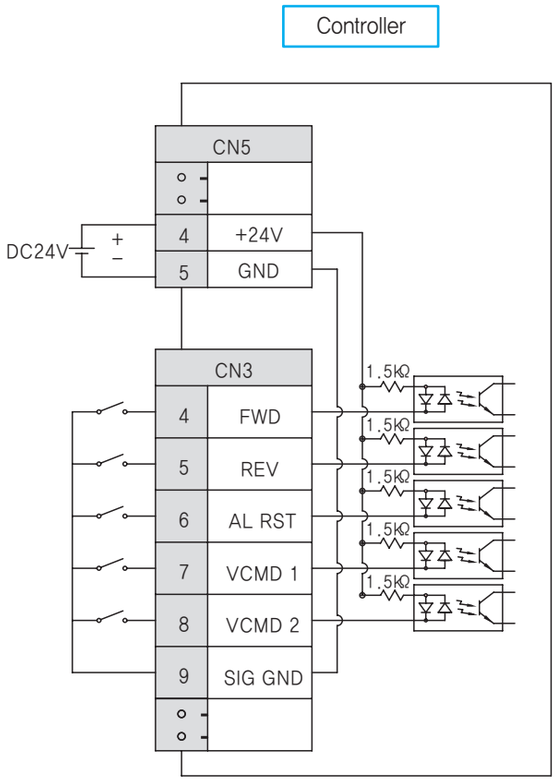


Output Circuit

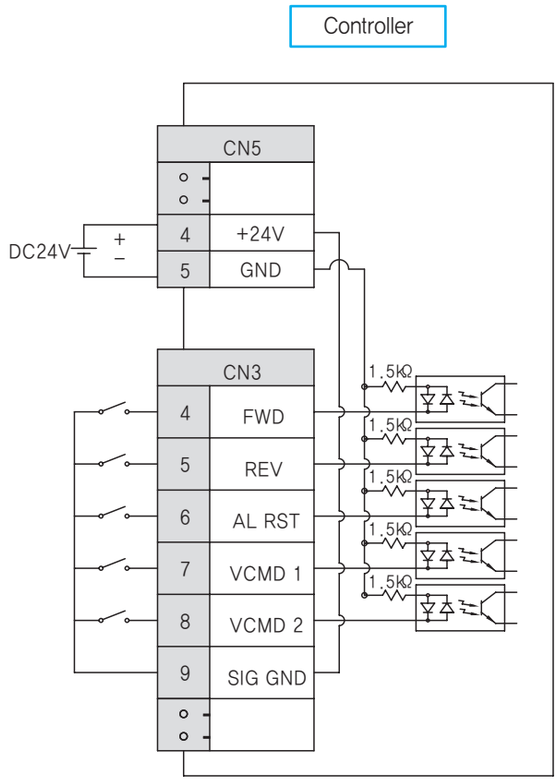


- Input COMMON(NPN, PNP) is set with the bottom switch of controller internal circuit board
- Initial Setting: NPN

Input Circuit



| Sink Logic |



| Source Logic |

Parameter Contents

NO.	Function	Range	Standard value	Note
1	Max. Speed	1460/1760	–	r/min
3	Speed Limit	50~1760	1760	r/min
4	Acceleration Time	0~15.0	0.1	Second (S)
5	Rotation Direction	0~1	0	
6	Gear Ratio	1~250	1	0
7	Control Mode	0~1	0	0 : Speed Control 1 : Torque Control
8	Zero Clamp	0~0.5	0.0	Voltage (V)
9	Speed Command Offset	0~0.5	0	Voltage (V)
10	Abnormal Signal Output	0~1	0	
13	Speed Control P Gain	1~255	100	
14	Speed Control I Gain	1~255	50	
20	Communication ID Setting	1~254	1	
21	IO Input Setting	0~1	0	0 : CN310 Input 1 : RS485 Input
22	Speed Input Setting	0~1	0	0:CN4 Potentiometer Input 1:RS485 Speed Command input
23	RS485 Communication Speed Setting	0~4	1	0:2,400 bps 1:9,600 bps 2:19,200 bps 3:38,400 bps 4:115,200 bps
30	Internal Speed Setting 1	0~Max. Speed	500	r/min
31	Internal Speed Setting 2	0~Max. Speed	1000	r/min
32	Internal Speed Setting 3	0~Max. Speed	1500	r/min
33	Internal Torque Setting 1	0~100	10	%
34	Internal Torque Setting 2	0~100	20	%
35	Internal Torque Setting 3	0~100	50	%

■ Speed control P, I gain

– Parameter which determines responsibility of speed control

– Vibration and hunting occur if value is too large

DSA Speed Controller

Features

- **Easy Connection**
  Operation is possible just by connecting the control unit into power supply after connecting the motor and control unit together using the connector.
- **Easy Operation**
  The speed can be set easily with the potentiometer on the front panel of the control unit.
- **Capacitor Built-in**
  A capacitor for the speed control circuit motor and the speed setting device are assembled in the control unit.
- **Possible to connect with other brand motor**
  * Other brand motor can be connected to the controller. Please contact us before use.

General Specifications

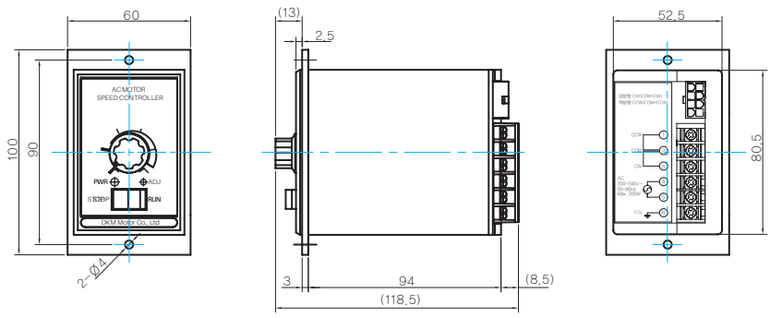
Model	DSA
Rated Voltage	AC 220~240V 50/60Hz
Voltage Regulation	±10%
Allowable Current	Below 5A
Control System	Phase control
Operating Range	50Hz: 90 ~ 1400 r/min
	60Hz: 90 ~ 1700 r/min
Speed Control	Internal volume
Speed Variation	±5%(Standard)
Motor Output	6W~180W
Ambient Temperature	-10℃ ~ 40℃
Ambient Humidity	35 ~ 85%RH
Insulation Resistance	Over 100MΩ(Base on 500VDC mega)
Dielectric Strength	1500VAC 50/60 for 1minute

Controller Coding System

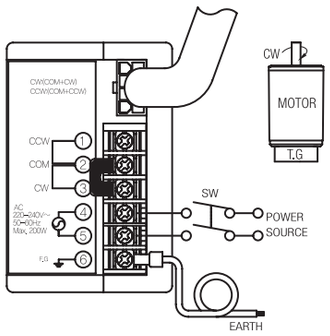
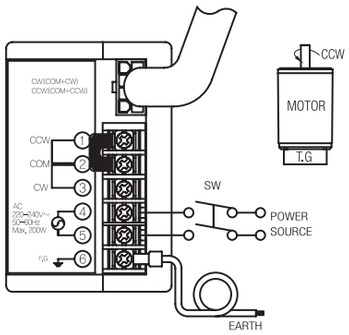
D S A — 006 — D

- **D** — **DKM Motor** Co., Ltd.
- **S** — **Speed** Controller
- **A** — **Analogue** Type
- **006** — **006** : 6W, **010** : 10W, **015** : 15W, **025** : 25W, **040** : 40W, **060** : 60W, **090** : 90W, **120** : 120W, **180** : 180W
- **D** — **D** : AC 220V 60Hz, **E** : AC 220V~240V 50Hz

Dimensions



Connection Diagram

CW DIRECTION	CCW DIRECTION
	

1) Connect control unit and lead wire connector of the motor.
2) Press stop button before connecting AC power to ④ and ⑤ terminals.
3) When AC power input, LED lights on.
4) CW Direction – Connect to ② COM and ③ CW
   CCW Direction – Connect to ② COM and ① CCW
5) Motor RPM is getting faster if speed volume turns to CW and Motor RPM is getting slower if speed volume turns to CCW.
6) If you operate 'RUN/STOP' switch to STOP, motor is stopped. Make sure this switch is not same as power ON/OFF.
   (When a motor has to stop for a long time, extra power switch should be installed.)

DSKM Speed Controller

Features

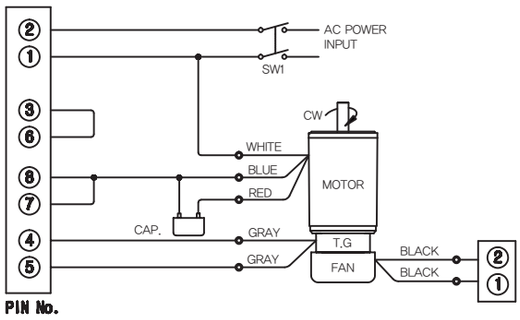
- **Compact Speed Control Pack**
  It is compact speed control pack with small plug-in (8-pin) type.
- **Easy Operation**
  The speed can be set easily with the dial on the front panel of the controller.
- **External Volume Attachable**
  The speed can be set easily with the external potentiometer which could be separated from controller body.
- **Various Functions**
  Bi-directional operation / Variable speed setting / Electric Brake / Multi-stage speed setting

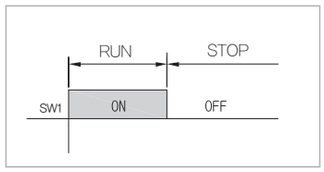
General Specifications

Model	DSKM-M1	DSKM-M2
Rated Voltage	AC 100~120V 50/60Hz	AC 220~240V 50/60Hz
Voltage Regulation	±10%	
Allowable Current	Below 4 VA	
Control System	Phase Control	
Operating Range	50Hz: 90 ~ 1400 r/min	
	60Hz: 90 ~ 1700 r/min	
Speed Control	Internal volume (External volume usable)	
Electric Brake	Possible to brake for certain period by electric brake	
Electric Braking Time	0.5second (standard value)	
Ambient Temperature	-10℃ ~ 55℃	
Ambient Humidity	35 ~ 85%RH	
Insulation Resistance	Over DC 500V 100MΩ (between power supply and external terminal)	
Dielectric Strength	AC 1500V for 1 minute (between the windings and the frame)	

Basic Electric Wiring

| Uni-directioinal operation + Variable speed |



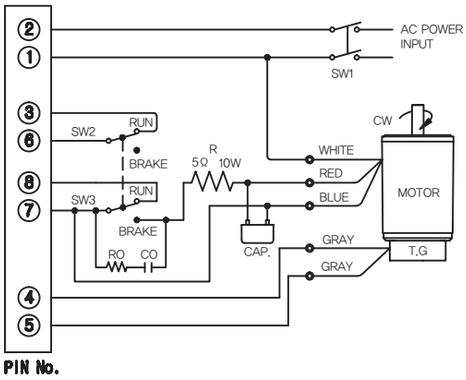


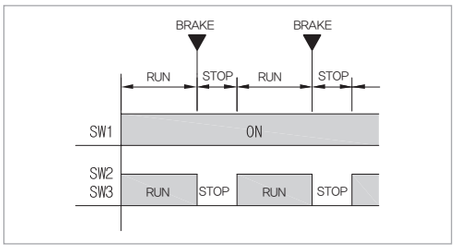
SW1	AC 125V or 250V 5A

• Exchange blue and red wire of the motor for CCW direction.

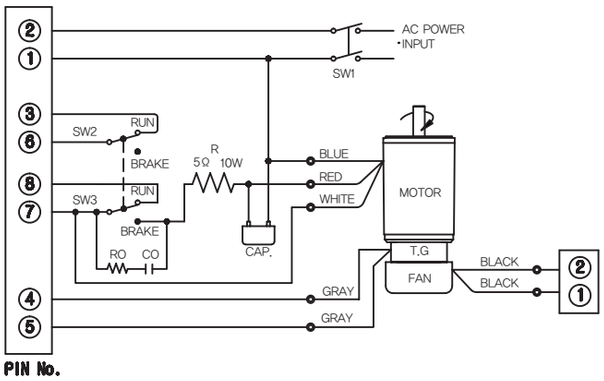
Uni-directional operation + Variable speed + Brake

- Below Motor Output 25W





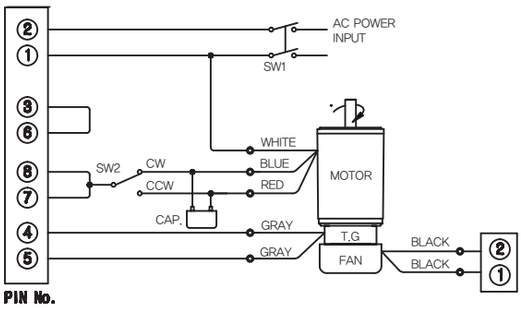
- Over Motor Output 40W

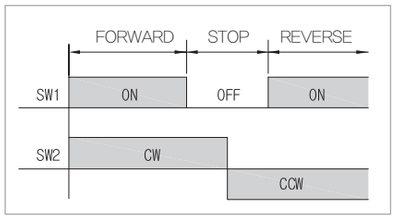


SW1 SW3	AC 125V or 250V MIN. 5A
SW2	DC 20V 10mA
SW1	RO=10~200Ω(MIN. 1/4W) C0 =0.1~0.2μF (AC 200 or 400WV)
SW1	4.7Ω~6.8Ω MIN. 10W

• Exchange blue and red wire of the motor for CCW direction.
• When change from run to stop,electric brake operates about 0.5 second and motor stops rapidly.

Bi-directional operation + Variable speed





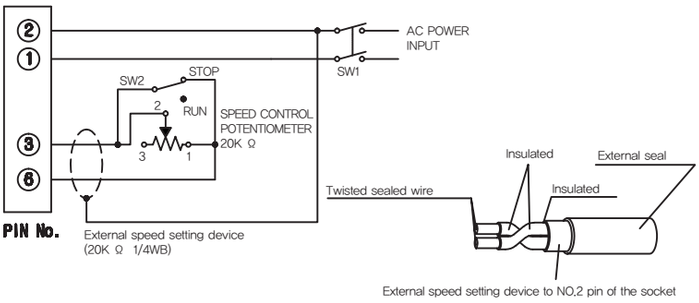
SW1 SW3	AC 125V or 250V MIN. 5A

• Set stop period and switch SW2 after the motor completely stop.

Applied Electrical Wiring

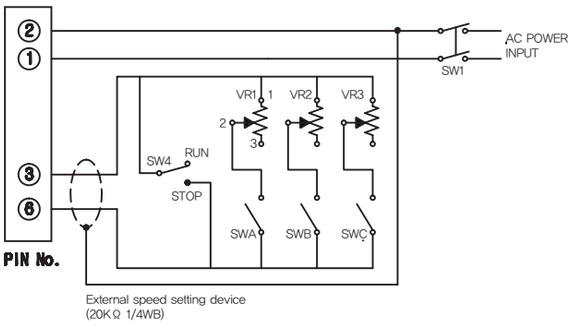
How to use external volume

- Long distance control



Caution
- Set internal volume "Zero" when using external volume
- Shorten the connection cable as much as possible.
- In case of malfunction, use twist shield cable.

- Multi-stage speed setting

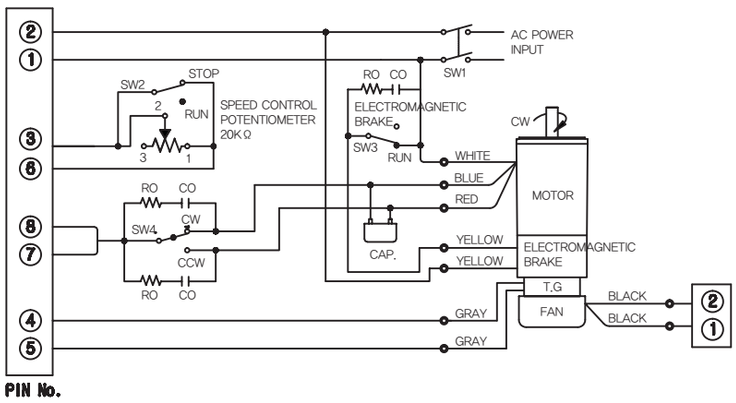


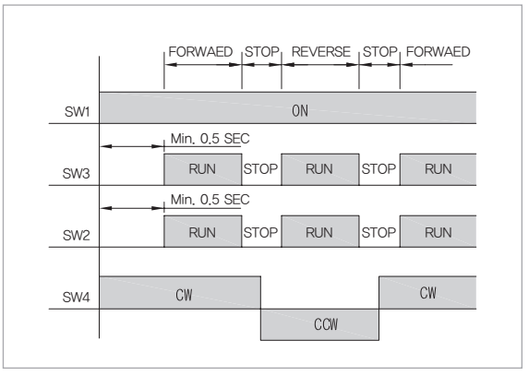
Caution
- Set the volume to 'Zero'.
- Set a speed repectively through the external volume, VR1, VR2 and VR3 by swiching SWA, SWB and SWC.

SW4	DC 20V 10㎃

Wiring Diagram for Brake Motor

When electric brake of controller is not used



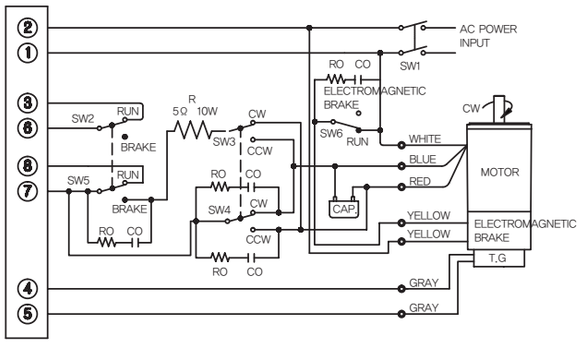


Caution
- Switch SW4 after the motor completely stops.
- Input time for power switch SW1 should be about 0.5 seconds faster than the signal of start operating of SW2 and SW3.
- When run/stop, operate with SW2 and SW3 while SW1 is ON.
- Set internal volume "Zero" when using external volume.

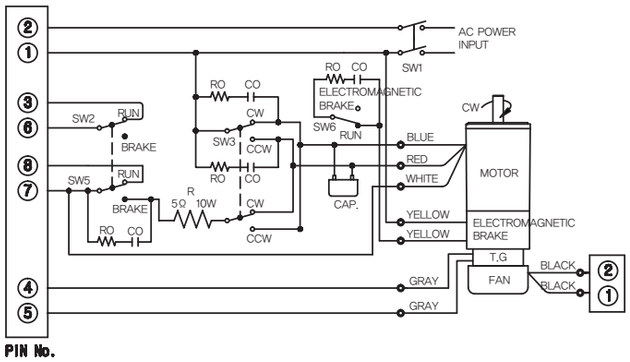
SW1 1,3,4	AC 125V or 250V Min.5A
SW2	DC 20V 10㎃
RO CO	RO=10~200Ω(Min.1/4W) C0 =0.1~0.2㎌ (AC 200 or 400WV)

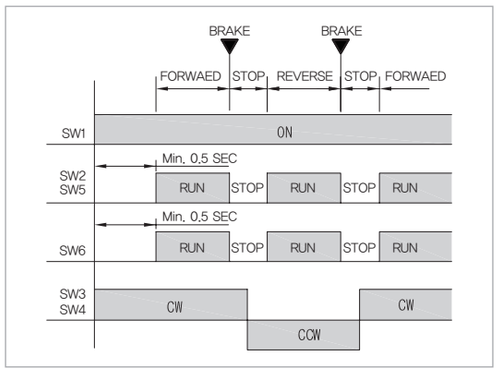
When electric brake of controller is used

- Motor 25W or less



- Motors 40W~180W



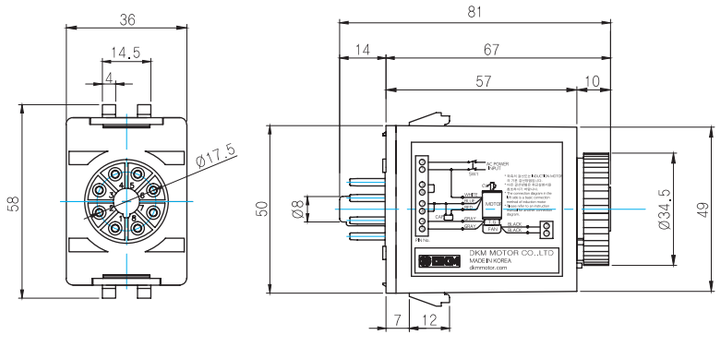


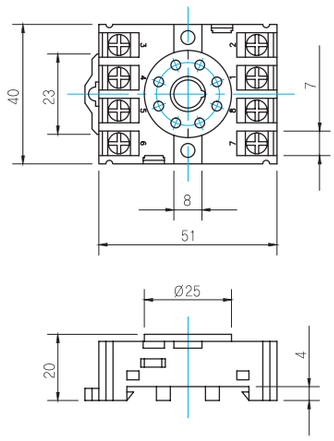
SW1 1,3,4,5,6	AC 125V or 250V Min.5A
SW2	DC 20V 10mA
RO CO	RO=10~200Ω(Min. 1/4W) C0 =0.1~0.2μF (AC 200 or 400WV)
R	4.7Ω ~ 6.8Ω Min. 10W

Caution

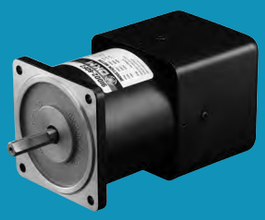
- When changed from run to stop, electromagnetic brake operates and motor stops rapidly.
- Operate SW3 and SW4 after the motor stops.
- Changing the period of SW3 and SW4 should be done quicker than starting signals of SW2, SW5, and SW6.
- Power input time for SW1 should be at least 0.5 seconds faster than starting signals of SW2, SW5 and SW6.
- When Run/Stop, operate with SW2, SW5 and SW6 while SW1 in ON.

Dimensions





Speed Control Induction Motor



Index

Speed Control Induction Motor 6W (□60mm)	B-225
Speed Control Induction Motor 6W (□70mm)	B-227
Speed Control Induction Motor 10W (□70mm)	B-229
Speed Control Induction Motor 15W (□70mm)	B-231
Speed Control Induction Motor 15W (□80mm)	B-233
Speed Control Induction Motor 25W (□80mm)	B-236
Speed Control Induction Motor 40W (□90mm)	B-239
Speed Control Induction Motor 60W (□90mm)	B-242
Speed Control Induction Motor 90W (□90mm)	B-246
Speed Control Induction Motor 120W (□90mm)	B-250
Speed Control Induction Motor 180W (□90mm)	B-254

S.C. Induction Motor 6W (□60mm)

6W

Speed Control
Induction Motor
6W(□60mm)

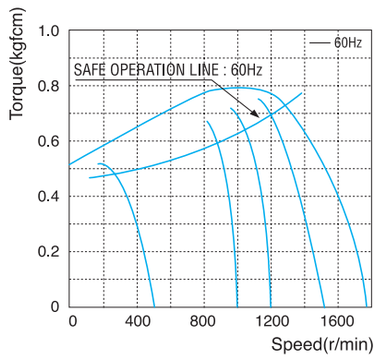
Motor Specification

Model 6SDG*-6G-C(L): Gear Type Shaft 6SDD*-6-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
6SD◇1(A)-6□	6SD◇1(A)-6□-L	6	1ø110	60	4	Cont.	90-1700	0.35	0.035	0.55	0.055	0.35	0.035	2.5 / 250
6SD◇B-6□-C	6SD◇B-6□-L	6	1ø100	50	4	Cont.	90-1400	0.38	0.038	0.48	0.048	0.30	0.030	3.0 / 250
				60			90-1700	0.35	0.035	0.55	0.055	0.35	0.035	
6SD◇C-6□-C	6SD◇C-6□-L	6	1ø200	50	4	Cont.	90-1400	0.38	0.038	0.48	0.048	0.30	0.030	0.8 / 450
				60			90-1700	0.39	0.39	0.55	0.055	0.35	0.035	
6SD◇2(D)-6□-C	6SD◇2(D)-6□-L	6	1ø220	60	4	Cont.	90-1700	0.39	0.039	0.55	0.055	0.40	0.040	0.7 / 450
6SD◇E-6□-C	6SD◇E-6□-L	6	1ø220	50	4	Cont.	90-1400	0.30	0.030	0.45	0.045	0.30	0.030	0.7 / 450
			1ø240					0.35	0.035	0.50	0.050	0.30	0.030	

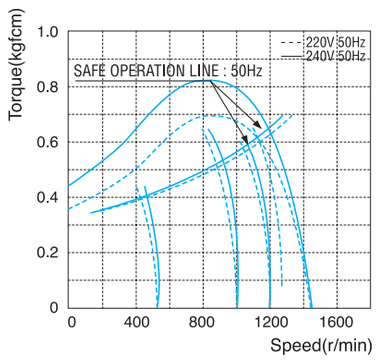
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) Impedance Protected Type

Speed-Torque Characteristics

6SDG1(A)-6G



6SDGE-6G



Motor Images

6SDD□-6

6SDG□-6G+6GBD□MH

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
6SDG*-6G	6GBD□MH	1200	110	60	kgfcm	1.3	1.6	2.2	2.7	3.3	4.0	4.5	5.6	6.7	8.0	8.0	10.0
					N.m	0.13	0.16	0.22	0.26	0.33	0.39	0.44	0.55	0.65	0.79	0.79	0.98
			220	60	kgfcm	1.3	1.6	2.2	2.7	3.3	4.0	4.5	5.6	6.7	8.0	8.0	10.0
					N.m	0.13	0.16	0.22	0.26	0.33	0.39	0.44	0.55	0.65	0.79	0.79	0.98
			220/240	50	kgfcm	1.2	1.5	2.0	2.4	3.0	3.6	4.1	5.1	6.1	7.3	7.3	9.1
					N.m	0.12	0.14	0.20	0.24	0.30	0.36	0.40	0.50	0.60	0.71	0.72	0.89
		90	110	60	kgfcm	0.9	1.0	1.4	1.7	2.1	2.6	2.8	3.5	4.3	5.1	5.1	6.4
					N.m	0.08	0.10	0.14	0.17	0.21	0.25	0.28	0.35	0.42	0.50	0.50	0.63
			220	60	kgfcm	1.0	1.2	1.6	1.9	2.4	2.9	3.2	4.1	4.9	5.8	5.8	7.3
					N.m	0.10	0.11	0.16	0.19	0.24	0.29	0.32	0.40	0.48	0.57	0.57	0.72
			220/240	50	kgfcm	0.7	0.9	1.2	1.5	1.8	2.2	2.4	3.0	3.6	4.4	4.4	5.5
					N.m	0.07	0.09	0.12	0.14	0.18	0.21	0.24	0.30	0.36	0.43	0.43	0.54

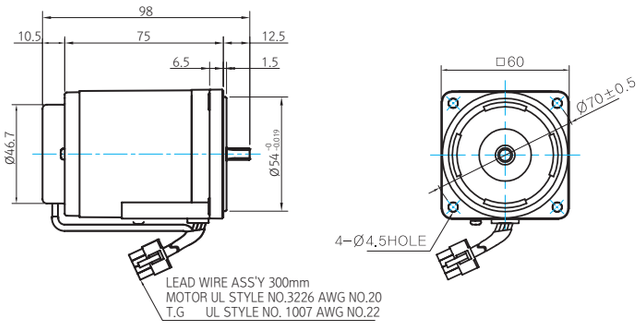
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200	250
6SDG*-6G	6GBD □ MH	1200	110	60	kgfcm	12.0	14.5	16.1	18.2	21.8	27.2	30.0	30.0	30.0	30.0	30.0	30.0	30.0
					N.m	1.18	1.42	1.57	1.78	2.13	2.67	2.94	2.94	2.94	2.94	2.94	2.94	2.94
			220	60	kgfcm	12.0	14.5	16.1	18.2	21.8	27.2	30.0	30.0	30.0	30.0	30.0	30.0	90.8
					N.m	1.18	1.42	1.57	1.78	2.13	2.67	2.94	2.94	2.94	2.94	2.94	2.94	8.89
			220/240	50	kgfcm	11.0	13.1	14.6	16.5	19.8	24.8	29.7	30.0	30.0	30.0	30.0	30.0	30.0
					N.m	1.07	1.29	1.43	1.62	1.94	2.43	2.91	2.94	2.94	2.94	2.94	2.94	2.94
		90	110	60	kgfcm	7.7	9.2	10.2	11.6	13.9	17.3	20.8	23.1	27.7	30.0	30.0	30.0	30.0
					N.m	0.75	0.90	1.00	1.13	1.36	1.70	2.04	2.26	2.72	2.94	2.94	2.94	2.94
			220	60	kgfcm	8.8	10.5	11.7	13.2	15.8	19.8	23.8	26.4	30.0	30.0	30.0	30.0	30.0
					N.m	0.86	1.03	1.14	1.29	1.55	1.94	2.33	2.59	2.94	2.94	2.94	2.94	2.94
			220/240	50	kgfcm	6.6	7.9	8.8	9.9	11.9	14.9	17.8	19.8	23.8	29.7	30.0	30.0	30.0
					N.m	0.64	0.77	0.86	0.97	1.16	1.46	1.75	1.94	2.33	2.91	2.94	2.94	2.94

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
; a white background indicates the rotation in the opposite direction.

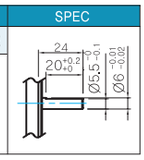
Dimensions

MOTOR ONLY

● MOTOR MODEL: 6SD□□-6 (NO FAN)



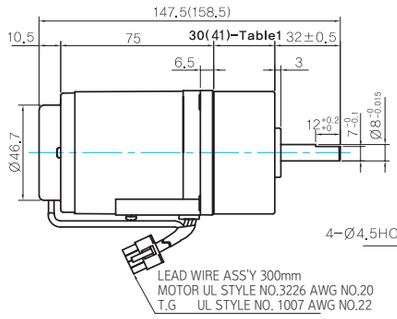
● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
6SDD□-6-□	

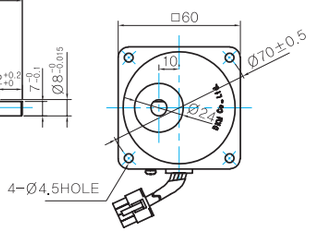
GEARED MOTOR

G TYPE GEARBOX

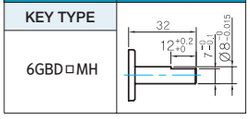
● MOTOR MODEL: 6SDG□-6G (NO FAN)



● GEARBOX MODEL: 6GBD□MH (NO FAN)



● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
6GBD□MH	

WEIGHT

PART		WEIGHT(kg)
MOTOR		0.75
GEAR BOX	6GBD3MH - 6GBD18MH	0.30
	6GBD20MH - 6GBD40MH	0.32
	6GBD50MH - 6GBD250MH	0.34

*The output flange and shaft are sold separately.

● 30(41)-Table1

SIZE(mm)	GEAR RATIO
30	6GBD3MH - 6GBD18MH
41	6GBD25MH - 6GBD180MH

S.C. Induction Motor 6W (□ 70mm)

6W

Speed Control
Induction Motor
6W(□ 70mm)

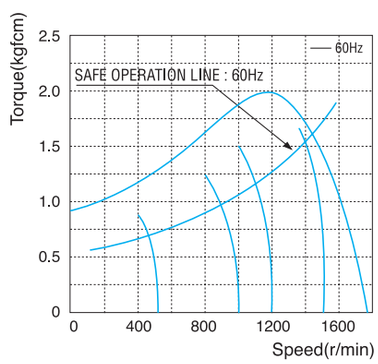
Motor Specification

Model (7SDG*-6G-C(L): Gear Type Shaft, 7SDD*-6-C(L): D-Cut Type Shaft)		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque 1200r/min		Permissible Torque 90r/min		Capacitor
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
7SD◇1(A)-6□-C	7SD◇1(A)-6□-L	6	1ø110	60	4	Cont.	90-1700	0.35	0.035	0.53	0.053	0.35	0.035	2.5 / 250
7SD◇B-6□-C	7SD◇B-6□-L	6	1ø100	50	4	Cont.	90-1400	0.37	0.037	0.47	0.047	0.30	0.030	3.0 / 250
				60			90-1700	0.37	0.037	0.54	0.054	0.36	0.036	
7SD◇C-6□-C	7SD◇C-6□-L	6	1ø200	50	4	Cont.	90-1400	0.35	0.035	0.45	0.045	0.30	0.030	0.8 / 450
				60			90-1700	0.35	0.035	0.52	0.052	0.35	0.035	
7SD◇2(D)-6□-C	7SD◇2(D)-6□-L	6	1ø220	60	4	Cont.	90-1700	0.39	0.039	0.55	0.055	0.35	0.035	0.7 / 450
7SD◇E-6□-C	7SD◇E-6□-L	6	1ø220	50	4	Cont.	90-1400	0.30	0.030	0.45	0.045	0.30	0.030	0.7 / 450
			1ø240					0.35	0.035	0.50	0.050	0.30	0.030	

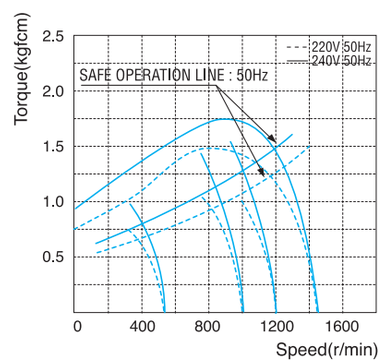
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Speed-Torque Characteristics

7SDG1(A)-6G / 7SDG2(D)-6G



7SDGE-6G



Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
7SDG*-6G	7GBK□BMH	1200	110	60	kgfcm	1.3	1.5	2.1	2.6	3.2	3.9	4.3	5.4	6.4	7.7	7.7	9.7
					N.m	0.13	0.15	0.21	0.25	0.32	0.38	0.42	0.53	0.63	0.76	0.76	0.95
			220	60	kgfcm	1.3	1.6	2.2	2.7	3.3	4.0	4.5	5.6	6.7	8.0	8.0	10.0
					N.m	0.13	0.16	0.22	0.26	0.33	0.39	0.44	0.55	0.65	0.79	0.79	0.98
			220/240	50	kgfcm	1.1	1.3	1.8	2.2	2.7	3.3	3.6	4.6	5.5	6.6	6.6	8.2
					N.m	0.11	0.13	0.18	0.21	0.27	0.32	0.36	0.45	0.54	0.64	0.64	0.80
		90	110	60	kgfcm	0.9	1.0	1.4	1.7	2.1	2.6	2.8	3.5	4.3	5.1	5.1	6.4
					N.m	0.08	0.10	0.14	0.17	0.21	0.25	0.28	0.35	0.42	0.50	0.50	0.63
			220	60	kgfcm	0.9	1.0	1.4	1.7	2.1	2.6	2.8	3.5	4.3	5.1	5.1	6.4
					N.m	0.08	0.10	0.14	0.17	0.21	0.25	0.28	0.35	0.42	0.50	0.50	0.63
			220/240	50	kgfcm	0.7	0.9	1.2	1.5	1.8	2.2	2.4	3.0	3.6	4.4	4.4	5.5
					N.m	0.07	0.09	0.12	0.14	0.18	0.21	0.24	0.30	0.36	0.43	0.43	0.54

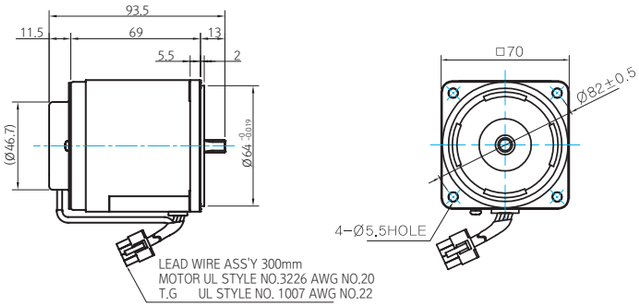
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200
7SDG*-6G	7GBK□BMH	1200	110	60	kgfcm	11.6	13.9	15.5	17.5	21.0	26.2	31.5	35.0	42.0	50.0	50.0	50.0
					N.m	1.14	1.36	1.52	1.71	2.06	2.57	3.09	3.43	4.11	4.90	4.90	4.90
			220	60	kgfcm	12.0	14.5	16.1	18.2	21.8	27.2	32.7	36.3	43.6	50.0	50.0	50.0
					N.m	1.18	1.42	1.57	1.78	2.13	2.67	3.20	3.56	4.27	4.90	4.90	4.90
			220/240	50	kgfcm	9.9	11.8	13.1	14.9	17.8	22.3	26.7	29.7	35.6	44.6	50.0	50.0
					N.m	0.97	1.16	1.29	1.46	1.75	2.18	2.62	2.91	3.49	4.37	4.90	4.90
		90	110	60	kgfcm	7.7	9.2	10.2	11.6	13.9	17.3	20.8	23.1	27.7	34.7	41.6	46.2
					N.m	0.75	0.90	1.00	1.13	1.36	1.70	2.04	2.26	2.72	3.40	4.07	4.53
			220	60	kgfcm	7.7	9.2	10.2	11.6	13.9	17.3	20.8	23.1	27.7	34.7	41.6	46.2
					N.m	0.75	0.90	1.00	1.13	1.36	1.70	2.04	2.26	2.72	3.40	4.07	4.53
			220/240	50	kgfcm	6.6	7.9	8.8	9.9	11.9	14.9	17.8	19.8	23.8	29.7	35.6	39.6
					N.m	0.64	0.77	0.86	0.97	1.16	1.46	1.75	1.94	2.33	2.91	3.49	3.88

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
; a white background indicates the rotation in the opposite direction.

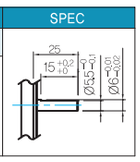
Dimensions

MOTOR ONLY

● MOTOR MODEL: 7SD□□-6 (NO FAN)



● MOTOR OUTPUT SHAFT

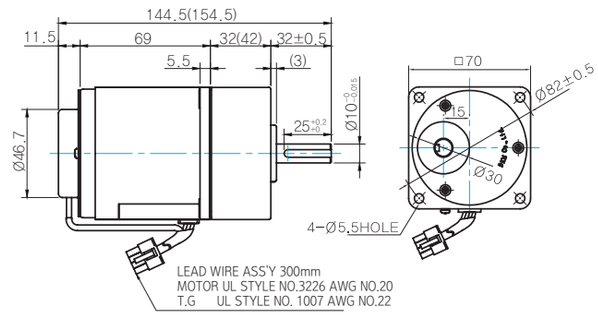
MODEL	SPEC
D-CUT TYPE	
7SDD□-6-□	

GEARED MOTOR

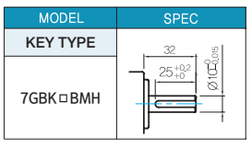
G TYPE GEARBOX

● MOTOR MODEL: 7SDG□-6G (NO FAN)

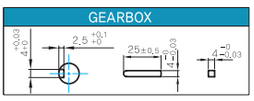
● GEARBOX MODEL: 7GBK□BMH



● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
7GBK□BMH	

● KEY SPEC

GEARBOX


WEIGHT

PART		WEIGHT(kg)
MOTOR		0.93
GEAR BOX	7GBK3BMH - 7GBK18BMH	0.38
	7GBK20BMH - 7GBK40BMH	0.48
	7GBK50BMH - 7GBK200BMH	0.53

*The output flange and shaft are sold separately.

● 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH - 7GBK18BMH
42	7GBK20BMH - 7GBK200BMH

Motor Images

7SDD□-6	7SDG□-6G+7GBK□BMH

S.C. Induction Motor 10W (□ 70mm)

10W Speed Control Induction Motor 10W(□ 70mm)

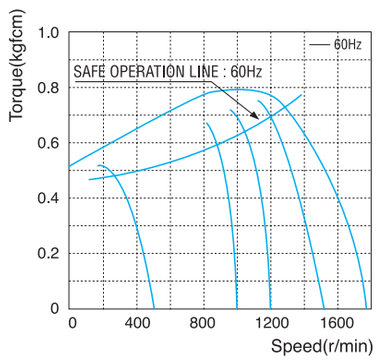
Motor Specification

Model (7SDG*-10G-C(L): Gear Type Shaft, 7SDD*-10-C(L): D-Cut Type Shaft) Connector Type	Lead Wire Type	Output W	Voltage V	Frequency Hz	Poles	Duty	Speed Range r/min	Starting Torque kgfcm	Starting Torque N.m	Permissible Torque 1200r/min kgfcm	Permissible Torque 1200r/min N.m	Permissible Torque 90r/min kgfcm	Permissible Torque 90r/min N.m	Capacitor μF / VAC
7SD◇1(A)-10□-C	7SD◇1(A)-10□-L	10	1ø110	60	4	Cont.	90-1700	0.40	0.040	0.70	0.070	0.36	0.036	3.0 / 250
7SD◇B-10□-C	7SD◇B-10□-L	10	1ø100	50	4	Cont.	90-1400	0.42	0.042	0.70	0.070	0.36	0.036	3.5 / 250
				60			90-1700	0.42	0.042	0.65	0.065	0.36	0.036	
7SD◇C-10□-C	7SD◇C-10□-L	10	1ø200	50	4	Cont.	90-1400	0.42	0.042	0.70	0.070	0.36	0.036	1.0 / 450
				60			90-1700	0.42	0.042	0.65	0.065	0.36	0.036	
7SD◇2(D)-10□-C	7SD◇2(D)-10□-L	10	1ø220	60	4	Cont.	90-1700	0.45	0.045	0.70	0.070	0.36	0.036	1.0 / 450
7SD◇E-10□-C	7SD◇E-10□-L	10	1ø220	50	4	Cont.	90-1400	0.40	0.040	0.60	0.060	0.35	0.035	1.0 / 450
			1ø240					0.45	0.045	0.80	0.080	0.36	0.036	

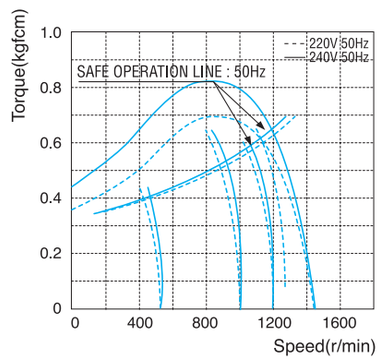
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Speed-Torque Characteristics

7SDG1(A)-10G / 7SDG2(D)-10G



7SDGE-10G



Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
7SDG*-10G	7GBK□BMH	1200	110	60	kgfcm	1.7	2.0	2.8	3.4	4.3	5.1	5.7	7.1	8.5	10.2	10.2	12.8
					N.m	0.17	0.20	0.28	0.33	0.42	0.50	0.56	0.69	0.83	1.00	1.00	1.25
			220	60	kgfcm	1.7	2.0	2.8	3.4	4.3	5.1	5.7	7.1	8.5	10.2	10.2	12.8
					N.m	0.17	0.20	0.28	0.33	0.42	0.50	0.56	0.69	0.83	1.00	1.00	1.25
			220/240	50	kgfcm	1.5	1.7	2.4	2.9	3.6	4.4	4.9	6.1	7.3	8.7	8.8	11.0
					N.m	0.14	0.17	0.24	0.29	0.36	0.43	0.48	0.60	0.71	0.86	0.86	1.07
		90	110	60	kgfcm	0.9	1.0	1.5	1.7	2.2	2.6	2.9	3.6	4.4	5.2	5.3	6.6
					N.m	0.09	0.10	0.14	0.17	0.21	0.26	0.29	0.36	0.43	0.51	0.52	0.64
			220	60	kgfcm	0.9	1.0	1.5	1.7	2.2	2.6	2.9	3.6	4.4	5.2	5.3	6.6
					N.m	0.09	0.10	0.14	0.17	0.21	0.26	0.29	0.36	0.43	0.51	0.52	0.64
			220/240	50	kgfcm	0.9	1.0	1.4	1.7	2.1	2.6	2.8	3.5	4.3	5.1	5.1	6.4
					N.m	0.08	0.10	0.14	0.17	0.21	0.25	0.28	0.35	0.42	0.50	0.50	0.63

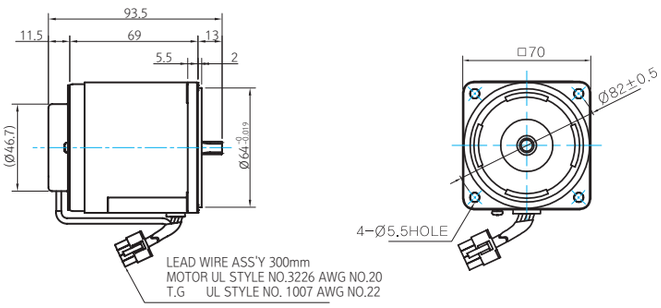
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200
7SDG*-10G	7GBK□BMH	1200	110	60	kgfcm	15.3	18.4	20.4	23.1	27.7	34.7	41.6	46.2	50.0	50.0	50.0	50.0
					N.m	1.50	1.80	2.00	2.26	2.72	3.40	4.07	4.53	4.90	4.90	4.90	4.90
			220	60	kgfcm	15.3	18.4	20.4	23.1	27.7	34.7	41.6	46.2	50.0	50.0	50.0	50.0
					N.m	1.50	1.80	2.00	2.26	2.72	3.40	4.07	4.53	4.90	4.90	4.90	4.90
			220/240	50	kgfcm	13.1	15.8	17.5	19.8	23.8	29.7	35.6	39.6	47.5	50.0	50.0	50.0
					N.m	1.29	1.55	1.72	1.94	2.33	2.91	3.49	3.88	4.66	4.90	4.90	4.90
		90	110	60	kgfcm	7.9	9.5	10.5	11.9	14.3	17.8	21.4	23.8	28.5	35.6	42.8	47.5
					N.m	0.77	0.93	1.03	1.16	1.40	1.75	2.10	2.33	2.79	3.49	4.19	4.66
			220	60	kgfcm	7.9	9.5	10.5	11.9	14.3	17.8	21.4	23.8	28.5	35.6	42.8	47.5
					N.m	0.77	0.93	1.03	1.16	1.40	1.75	2.10	2.33	2.79	3.49	4.19	4.66
			220/240	50	kgfcm	7.7	9.2	10.2	11.6	13.9	17.3	20.8	23.1	27.7	34.7	41.6	46.2
					N.m	0.75	0.90	1.00	1.13	1.36	1.70	2.04	2.26	2.72	3.40	4.07	4.53

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
: a white background indicates the rotation in the opposite direction.

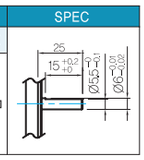
Dimensions

MOTOR ONLY

● MOTOR MODEL: 7SD□□-10(NO FAN)



● MOTOR OUTPUT SHAFT

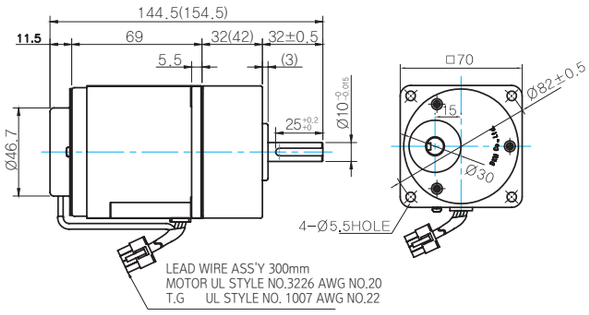
MODEL	SPEC
D-CUT TYPE	
7SDD□-10-□	

GEARED MOTOR

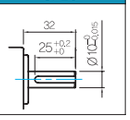
G TYPE GEARBOX

● MOTOR MODEL:
7SDG□-10G (NO FAN)

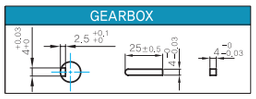
● GEARBOX MODEL:
7GBK□BMH



● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
7GBK□BMH	

● KEY SPEC

GEARBOX


WEIGHT

PART		WEIGHT(kg)
MOTOR		0.93
GEAR BOX	7GBK3BMH - 7GBK18BMH	0.38
	7GBK20BMH - 7GBK40BMH	0.48
	7GBK50BMH - 7GBK200BMH	0.53

*The output flange and shaft are sold separately.

● 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH – 7GBK18BMH
42	7GBK20BMH – 7GBK200BMH

Motor Images

7SDD□-10	7SDG□-10G+7GBK□BMH

15W Speed Control Induction Motor 15W(□70mm)

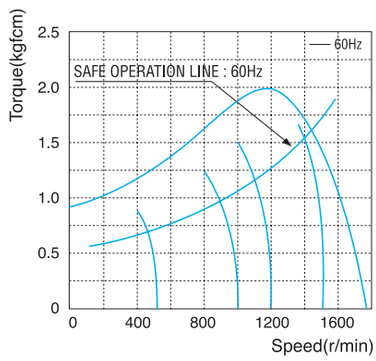
Motor Specification

Model 7SDG*-15G-C(L): Gear Type Shaft 7SDD*-15-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
7SD◇1(A)-15□-C	7SD◇1(A)-15□-L	15	1ø110	60	4	Cont.	90-1700	0.70	0.070	1.15	0.115	0.45	0.045	3.5 / 250
7SD◇B-15□-C	7SD◇B-15□-L	15	1ø100	50	4	Cont.	90-1400	0.65	0.065	1.10	0.110	0.43	0.043	5.0 / 250
				60			90-1700	0.70	0.070	1.15	0.115	0.45	0.045	
7SD◇C-15□-C	7SD◇C-15□-L	15	1ø200	50	4	Cont.	90-1400	0.65	0.065	1.10	0.110	0.43	0.043	1.2 / 450
				60			90-1700	0.65	0.065	1.10	0.110	0.45	0.045	
7SD◇2(D)-15□-C	7SD◇2(D)-15□-L	15	1ø220	60	4	Cont.	90-1700	0.70	0.070	1.15	0.115	0.45	0.045	1.2 / 450
7SD◇E-15□-C	7SD◇E-15□-L	15	1ø220	50	4	Cont.	90-1400	0.65	0.065	1.05	0.105	0.43	0.043	1.2 / 450
			1ø240					0.70	0.070	1.25	0.125	0.45	0.045	

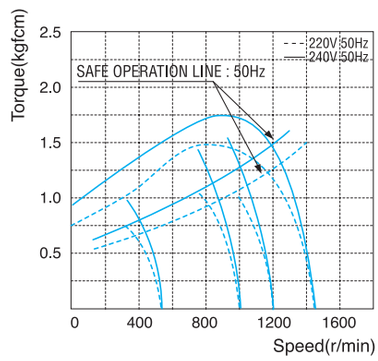
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Speed-Torque Characteristics

7SDG1(A)-15G / 7SDG2(D)-15G



7SDGE-15G



Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
7SDG*-15G	7GBK□BMH	1200	110	60	kgfcm	2.8	3.4	4.7	5.6	7.0	8.4	9.3	11.6	14.0	16.8	16.8	21.0
					N.m	0.27	0.33	0.46	0.55	0.68	0.82	0.91	1.14	1.37	1.64	1.65	2.06
			220	60	kgfcm	2.8	3.4	4.7	5.6	7.0	8.4	9.3	11.6	14.0	16.8	16.8	21.0
					N.m	0.27	0.33	0.46	0.55	0.68	0.82	0.91	1.14	1.37	1.64	1.65	2.06
			220/240	50	kgfcm	2.6	3.1	4.3	5.1	6.4	7.7	8.5	10.6	12.8	15.3	15.3	19.2
					N.m	0.25	0.30	0.42	0.50	0.63	0.75	0.83	1.04	1.25	1.50	1.50	1.88
		90	110	60	kgfcm	1.1	1.3	1.8	2.2	2.7	3.3	3.6	4.6	5.5	6.6	6.6	8.2
					N.m	0.11	0.13	0.18	0.21	0.27	0.32	0.36	0.45	0.54	0.64	0.64	0.80
			220	60	kgfcm	1.1	1.3	1.8	2.2	2.7	3.3	3.6	4.6	5.5	6.6	6.6	8.2
					N.m	0.11	0.13	0.18	0.21	0.27	0.32	0.36	0.45	0.54	0.64	0.64	0.80
			220/240	50	kgfcm	1.0	1.3	1.7	2.1	2.6	3.1	3.5	4.4	5.2	6.3	6.3	7.8
					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

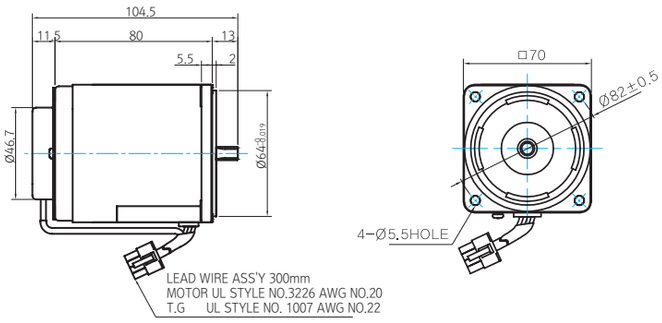
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200
7SDG*-15G	7GBK□BMH	1200	110	60	kgfcm	25.2	30.2	33.6	38.0	45.5	50.0	50.0	50.0	50.0	50.0	50.0	50.0
					N.m	2.47	2.96	3.29	3.72	4.46	4.90	4.90	4.90	4.90	4.90	4.90	4.90
			220	60	kgfcm	25.2	30.2	33.6	38.0	45.5	50.0	50.0	50.0	50.0	50.0	50.0	50.0
					N.m	2.47	2.96	3.29	3.72	4.46	4.90	4.90	4.90	4.90	4.90	4.90	4.90
			220/240	50	kgfcm	23.0	27.6	30.7	34.7	41.6	50.0	50.0	50.0	50.0	50.0	50.0	50.0
					N.m	2.25	2.70	3.00	3.40	4.07	4.90	4.90	4.90	4.90	4.90	4.90	4.90
		90	110	60	kgfcm	9.9	11.8	13.1	14.9	17.8	22.3	26.7	29.7	35.6	44.6	50.0	50.0
					N.m	0.97	1.16	1.29	1.46	1.75	2.18	2.62	2.91	3.49	4.37	4.90	4.90
			220	60	kgfcm	9.9	11.8	13.1	14.9	17.8	22.3	26.7	29.7	35.6	44.6	50.0	50.0
					N.m	0.97	1.16	1.29	1.46	1.75	2.18	2.62	2.91	3.49	4.37	4.90	4.90
			220/240	50	kgfcm	9.4	11.3	12.6	14.2	17.0	21.3	25.5	28.4	34.1	42.6	50.0	50.0
					N.m	0.92	1.11	1.23	1.39	1.67	2.09	2.50	2.78	3.34	4.17	4.90	4.90

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
; a white background indicates the rotation in the opposite direction.

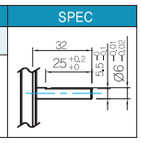
Dimensions

MOTOR ONLY

● MOTOR MODEL: 7SD□□-15 (NO FAN)



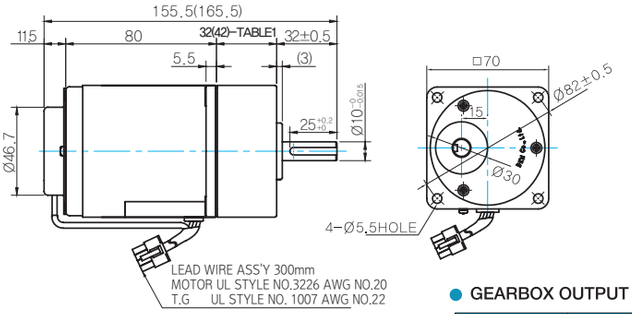
● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
7SDD□-15-□	

GEARED MOTOR

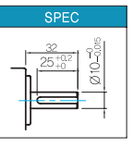
G TYPE GEARBOX

● MOTOR MODEL: 7SDG□-15G (NO FAN)



● GEARBOX MODEL: 7GBK□BMH

● GEARBOX OUTPUT SHAFT

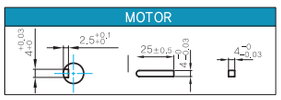
MODEL	SPEC
KEY TYPE	
7GBK□BMH	

WEIGHT

PART		WEIGHT(kg)
MOTOR		1.20
GEAR BOX	7GBK3BMH - 7GBK18BMH	0.38
	7GBK20BMH - 7GBK40BMH	0.48
	7GBK50BMH - 7GBK200BMH	0.53

*The output flange and shaft are sold separately.

● KEY SPEC

MOTOR


● 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH - 7GBK18BMH
42	7GBK20BMH - 7GBK200BMH

Motor Images

7SDD□-15	7SDG□-15G+7GBK□BMH

S.C. Induction Motor 15W (□ 80mm)

15W Speed Control Induction Motor 15W(□ 80mm)

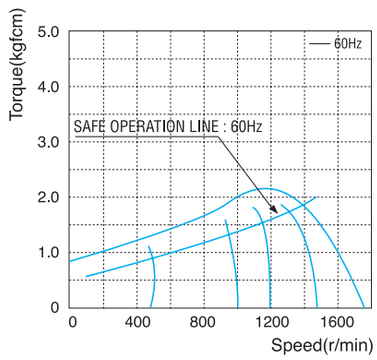
Motor Specification

Model 8SDG*-15□-C(L): Gear Type Shaft 8SDD*-15-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
8SD◇1(A)-15□-C	8SD◇1(A)-15□-L	15	1ø110	60	4	Cont.	90-1700	0.70	0.070	1.50	0.150	0.45	0.045	3.5 / 250
8SD◇B-15□-C	8SD◇B-15□-L	15	1ø100	50	4	Cont.	90-1400	0.70	0.070	1.40	0.140	0.45	0.045	5.0 / 250
				60			90-1700	0.70	0.070	1.50	0.150	0.45	0.045	
8SD◇C-15□-C	8SD◇C-15□-L	15	1ø200	50	4	Cont.	90-1400	0.70	0.070	1.40	0.140	0.45	0.045	1.2 / 450
				60			90-1700	0.70	0.070	1.50	0.150	0.45	0.045	
8SD◇2(D)-15□-C	8SD◇2(D)-15□-L	15	1ø220	60	4	Cont.	90-1700	0.70	0.070	1.50	0.150	0.45	0.045	1.2 / 450
8SD◇E-15□-C	8SD◇E-15□-L	15	1ø220	50	4	Cont.	90-1400	0.65	0.065	1.20	0.120	0.43	0.043	1.2 / 450
			1ø240					0.70	0.070	1.40	0.140	0.45	0.045	

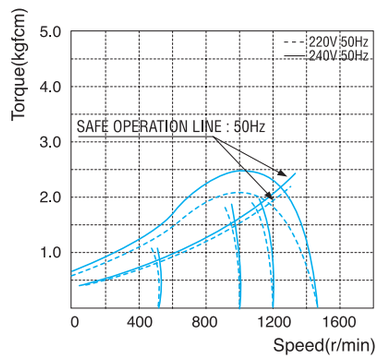
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Speed-Torque Characteristics

8SDG1(A)-15□ / 8SDG2(D)-15□



8SDGE-15□



Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36
8SDG*-15G	8GBK□BMH	1200	110	60	kgfcm	3.6	4.4	6.1	7.3	9.1	10.9	12.2	15.2	18.2	21.9	21.9	27.4	32.9	39.4
					N.m	0.36	0.43	0.60	0.71	0.89	1.07	1.19	1.49	1.79	2.14	2.15	2.68	3.22	3.86
			220	60	kgfcm	3.6	4.4	6.1	7.3	9.1	10.9	12.2	15.2	18.2	21.9	21.9	27.4	32.9	39.4
					N.m	0.36	0.43	0.60	0.71	0.89	1.07	1.19	1.49	1.79	2.14	2.15	2.68	3.22	3.86
			220/240	50	kgfcm	3.4	4.1	5.7	6.8	8.5	10.2	11.3	14.2	17.0	20.4	20.4	25.6	30.7	36.8
					N.m	0.33	0.40	0.56	0.67	0.83	1.00	1.11	1.39	1.67	2.00	2.00	2.50	3.00	3.61
		90	110	60	kgfcm	1.1	1.3	1.8	2.2	2.7	3.3	3.6	4.6	5.5	6.6	6.6	8.2	9.9	11.8
					N.m	0.11	0.13	0.18	0.21	0.27	0.32	0.36	0.45	0.54	0.64	0.64	0.80	0.97	1.16
			220	60	kgfcm	1.1	1.3	1.8	2.2	2.7	3.3	3.6	4.6	5.5	6.6	6.6	8.2	9.9	11.8
					N.m	0.11	0.13	0.18	0.21	0.27	0.32	0.36	0.45	0.54	0.64	0.64	0.80	0.97	1.16
			220/240	50	kgfcm	1.1	1.3	1.8	2.2	2.7	3.3	3.6	4.6	5.5	6.6	6.6	8.2	9.9	11.8
					N.m	0.11	0.13	0.18	0.21	0.27	0.32	0.36	0.45	0.54	0.64	0.64	0.80	0.97	1.16

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	40	50	60	75	90	100	120	150	180	200	250	300	360
8SDG*-15G	8GBK□ BMH	1200	110	60	kgfcm	43.8	49.5	59.4	74.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	4.29	4.85	5.82	7.28	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220	60	kgfcm	43.8	49.5	59.4	74.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	4.29	4.85	5.82	7.28	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220/240	50	kgfcm	40.9	46.2	55.4	69.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	4.01	4.53	5.43	6.79	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
		90	110	60	kgfcm	13.1	14.9	17.8	22.3	26.7	29.7	35.6	44.6	53.5	59.4	74.3	80.0	80.0
					N.m	1.29	1.46	1.75	2.18	2.62	2.91	3.49	4.37	5.24	5.82	7.28	7.84	7.84
			220	60	kgfcm	13.1	14.9	17.8	22.3	26.7	29.7	35.6	44.6	53.5	59.4	74.3	80.0	80.0
					N.m	1.29	1.46	1.75	2.18	2.62	2.91	3.49	4.37	5.24	5.82	7.28	7.84	7.84
			220/240	50	kgfcm	13.1	14.9	17.8	22.3	26.7	29.7	35.6	44.6	53.5	59.4	74.3	80.0	80.0
					N.m	1.29	1.46	1.75	2.18	2.62	2.91	3.49	4.37	5.24	5.82	7.28	7.84	7.84

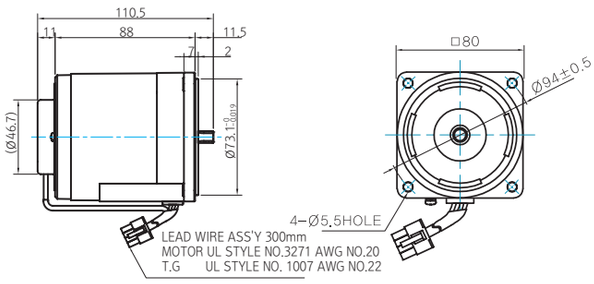
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
8SDG*-15W	8WD□BL/□ BR/□BRL	1200	110	60	kgfcm	12.3	14.4	17.3	20.0	26.3	29.7	34.6	45.0	49.5
					N.m	1.21	1.41	1.70	1.96	2.57	2.91	3.39	4.41	4.85
			220	60	kgfcm	12.5	14.9	18.7	22.4	31.1	37.4	44.8	62.3	74.7
					N.m	1.22	1.46	1.83	2.20	3.05	3.66	4.39	6.10	7.32
			220/240	50	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
		90	110	60	kgfcm	3.7	4.3	5.2	6.0	7.9	8.9	10.4	13.5	14.9
					N.m	0.36	0.42	0.51	0.59	0.77	0.87	1.02	1.32	1.46
			220	60	kgfcm	3.7	4.3	5.2	6.0	7.9	8.9	10.4	13.5	14.9
					N.m	0.36	0.42	0.51	0.59	0.77	0.87	1.02	1.32	1.46
			220/240	50	kgfcm	3.7	4.3	5.2	6.0	7.9	8.9	10.4	13.5	14.9
					N.m	0.36	0.42	0.51	0.59	0.77	0.87	1.02	1.32	1.46

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
; a white background indicates the rotation in the opposite direction.

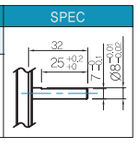
Dimensions

MOTOR ONLY

● MOTOR MODEL: 8SD□□-15 (NO FAN)

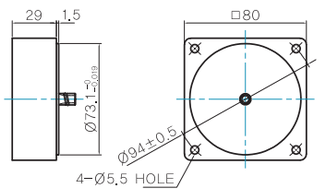


● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
8SDD□-15-□	

INTER-DECIMAL GEARBOX

● MODEL: 8XD10□□



B AC Motors

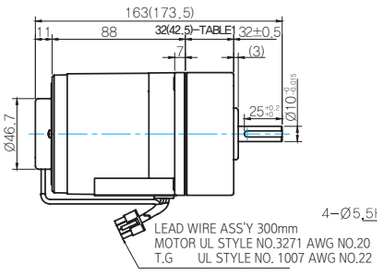
S.C. Induction Motor 15W (□ 80mm)

Dimensions

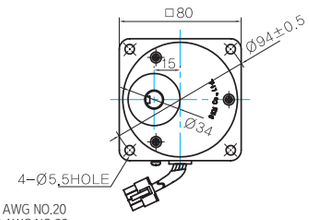
GEARED MOTOR

G TYPE GEARBOX

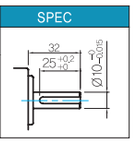
- MOTOR MODEL: 8SDG□–15G (NO FAN)



- GEARBOX MODEL: 8GBK□BMH



- GEARBOX OUTPUT SHAFT

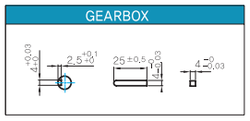
MODEL	SPEC
KEY TYPE	
8GBK□BMH	

- 32(42.5)-Table1

SIZE(mm)	GEAR RATIO
32	8GBK3BMH – 8GBK18BMH
42.5	8GBK20BMH – 8GBK360BMH

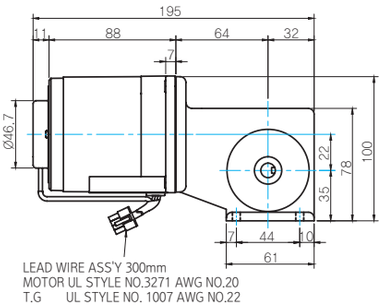
- KEY SPEC

GEARBOX

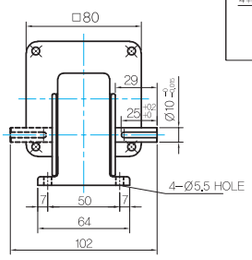


W TYPE GEARBOX

- MOTOR MODEL: 8SDG□–15W (NO FAN)

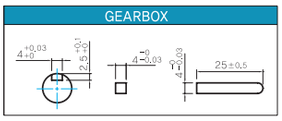


- GEARBOX MODEL: 8WD□BL/BR/BRL



- KEY SPEC

GEARBOX



WEIGHT

PART		WEIGHT(kg)
MOTOR		1.66
GEAR BOX	8GBK3BMH – 8GBK18BMH	0.56
	8GBK20BMH – 8GBK40BMH	0.65
	8GBK50BMH – 8GBK360BMH	0.72
	8WD□BL/BR/BRL	0.68
	8XD10○○	0.45

*The output flange and shaft are sold separately.

Motor Images

8SDD□–15	8SDG□–15G+8GBK□BMH	8SDG□–15W+8WD□BL

25W Speed Control Induction Motor 25W(□ 80mm)

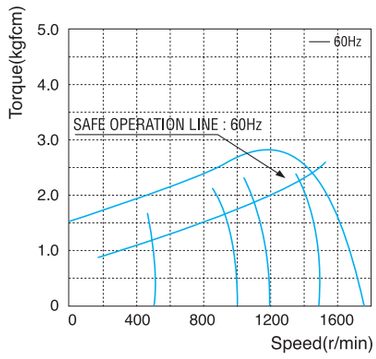
Motor Specification

Model 8SDG*-25□-C(L): Gear Type Shaft 8SDD*-25-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
8SD◇1(A)-25□-C	8SD◇1(A)-25□-L	25	1ø110	60	4	Cont.	90-1700	1.00	0.100	1.70	0.170	0.60	0.060	6.0 / 250
8SD◇B-25□-C	8SD◇B-25□-L	25	1ø100	50	4	Cont.	90-1400	0.80	0.800	1.50	0.150	0.50	0.050	6.0 / 250
				60			90-1700	0.90	0.090	1.70	0.170	0.60	0.060	
8SD◇C-25□-C	8SD◇C-25□-L	25	1ø200	50	4	Cont.	90-1400	0.80	0.800	1.50	0.150	0.50	0.050	1.5 / 450
				60			90-1700	0.90	0.090	1.70	0.170	0.60	0.060	
8SD◇2(D)-25□-C	8SD◇2(D)-25□-L	25	1ø220	60	4	Cont.	90-1700	1.00	0.100	1.80	0.180	0.60	0.060	1.5 / 450
8SD◇E-25□-C	8SD◇E-25□-L	25	1ø220	50	4	Cont.	90-1400	0.80	0.080	1.50	0.150	0.50	0.050	1.5 / 450
			1ø240					1.00	0.100	1.80	0.180	0.52	0.052	

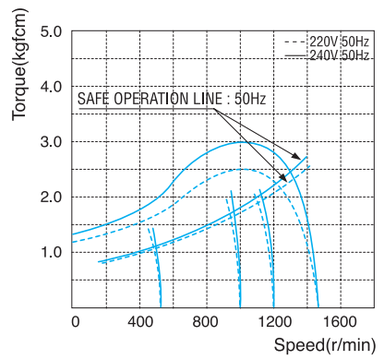
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Speed-Torque Characteristics

8SDG1(A)-25□ / 8SDG2(D)-25□



8SDGE-25□



Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36
8SDG*-25G	8GBK□BMH	1200	110	60	kgfcm	4.1	5.0	6.9	8.3	10.3	12.4	13.8	17.2	20.7	24.8	24.8	31.0	37.2	44.7
					N.m	0.40	0.49	0.67	0.81	1.01	1.21	1.35	1.69	2.02	2.43	2.43	3.04	3.65	4.38
			220	60	kgfcm	4.4	5.2	7.3	8.7	10.9	13.1	14.6	18.2	21.9	26.2	26.3	32.9	39.4	47.3
					N.m	0.43	0.51	0.71	0.86	1.07	1.29	1.43	1.79	2.14	2.57	2.58	3.22	3.86	4.64
			220/240	50	kgfcm	4.4	5.2	7.3	8.7	10.9	13.1	14.6	18.2	21.9	26.2	26.3	32.9	39.4	47.3
					N.m	0.43	0.51	0.71	0.86	1.07	1.29	1.43	1.79	2.14	2.57	2.58	3.22	3.86	4.64
		90	110	60	kgfcm	1.5	1.7	2.4	2.9	3.6	4.4	4.9	6.1	7.3	8.7	8.8	11.0	13.1	15.8
					N.m	0.14	0.17	0.24	0.29	0.36	0.43	0.48	0.60	0.71	0.86	0.86	1.07	1.29	1.55
			220	60	kgfcm	1.5	1.7	2.4	2.9	3.6	4.4	4.9	6.1	7.3	8.7	8.8	11.0	13.1	15.8
					N.m	0.14	0.17	0.24	0.29	0.36	0.43	0.48	0.60	0.71	0.86	0.86	1.07	1.29	1.55
			220/240	50	kgfcm	1.3	1.5	2.1	2.5	3.2	3.8	4.2	5.3	6.3	7.6	7.6	9.5	11.4	13.7
					N.m	0.12	0.15	0.21	0.25	0.31	0.37	0.41	0.52	0.62	0.74	0.74	0.93	1.12	1.34

B AC Motors

S.C. Induction Motor 25W (□ 80mm)

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	40	50	60	75	90	100	120	150	180	200	250	300	360
8SDG*-25G	8GBK□BMH	1200	110	60	kgfcm	49.6	56.1	67.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	4.86	5.50	6.60	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220	60	kgfcm	52.6	59.4	71.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	5.15	5.82	6.99	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220/240	50	kgfcm	52.6	59.4	71.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	5.15	5.82	6.99	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
		90	110	60	kgfcm	17.5	19.8	23.8	29.7	35.6	39.6	47.5	59.4	71.3	79.2	80.0	80.0	80.0
					N.m	1.72	1.94	2.33	2.91	3.49	3.88	4.66	5.82	6.99	7.76	7.84	7.84	7.84
			220	60	kgfcm	17.5	19.8	23.8	29.7	35.6	39.6	47.5	59.4	71.3	79.2	80.0	80.0	80.0
					N.m	1.72	1.94	2.33	2.91	3.49	3.88	4.66	5.82	6.99	7.76	7.84	7.84	7.84
			220/240	50	kgfcm	15.2	17.2	20.6	25.7	30.9	34.3	41.2	51.5	61.8	68.6	80.0	80.0	80.0
					N.m	1.49	1.68	2.02	2.52	3.03	3.36	4.04	5.05	6.05	6.73	7.84	7.84	7.84

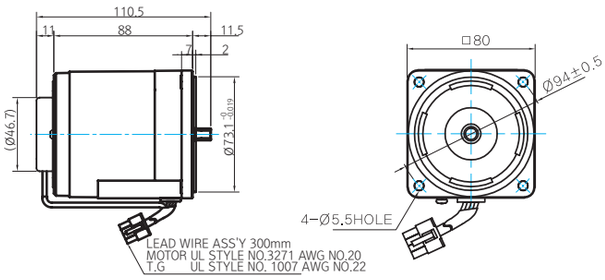
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
8SDG*-25W	8WD□BL/□BR/□BRL	1200	110	60	kgfcm	13.9	16.3	19.6	22.6	29.8	33.7	39.2	51.0	56.1
					N.m	1.37	1.60	1.92	2.22	2.92	3.30	3.84	5.00	5.50
			220	60	kgfcm	14.9	17.9	22.4	26.9	37.4	44.8	53.8	74.7	81.6
					N.m	1.46	1.76	2.20	2.64	3.66	4.39	5.27	7.32	8.00
			220/240	50	kgfcm	14.8	17.3	20.8	24.0	31.5	35.6	41.5	54.0	59.4
					N.m	1.45	1.69	2.04	2.35	3.09	3.49	4.06	5.29	5.82
		90	110	60	kgfcm	4.9	5.8	6.9	8.0	10.5	11.9	13.8	18.0	19.8
					N.m	0.48	0.56	0.68	0.78	1.03	1.16	1.35	1.76	1.94
			220	60	kgfcm	4.9	5.8	6.9	8.0	10.5	11.9	13.8	18.0	19.8
					N.m	0.48	0.56	0.68	0.78	1.03	1.16	1.35	1.76	1.94
			220/240	50	kgfcm	4.3	5.0	6.0	6.9	9.1	10.3	12.0	15.6	17.2
					N.m	0.42	0.49	0.59	0.68	0.89	1.01	1.17	1.53	1.68

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
; a white background indicates the rotation in the opposite direction.

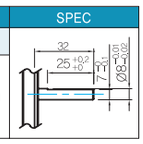
Dimensions

MOTOR ONLY

- MOTOR MODEL: 8SD□□-25 (NO FAN)

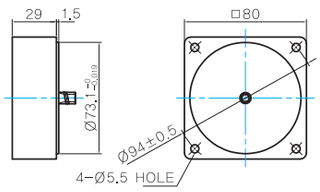


- MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
8SDD□-25-□	

INTER-DECIMAL GEARBOX

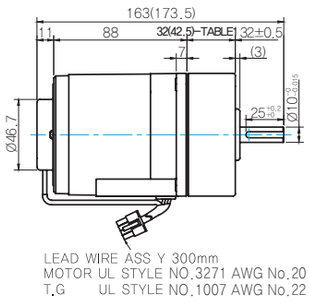
- MODEL: 8XD10□□



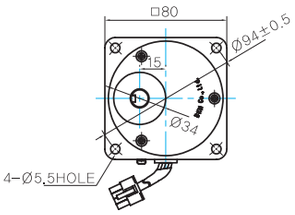
GEARED MOTOR

G TYPE GEARBOX

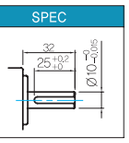
- MOTOR MODEL: 8SDG□-25G (NO FAN)



- GEARBOX MODEL: 8GBK□BMH



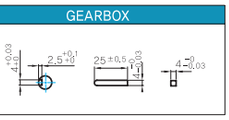
- GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
8GBK□BMH	

- 32(42.5)-Table1

SIZE(mm)	GEAR RATIO
32	8GBK3BMH – 8GBK18BMH
42.5	8GBK20BMH – 8GBK360BMH

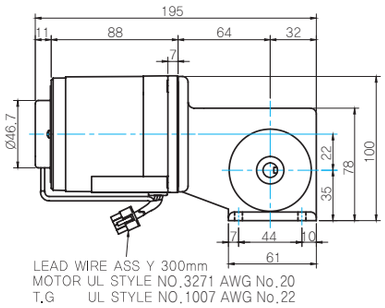
- KEY SPEC

GEARBOX


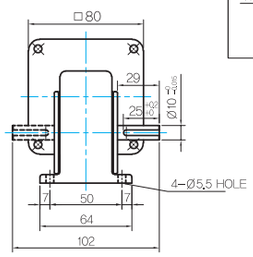
Dimensions

W TYPE GEARBOX

● MOTOR MODEL:
8SDG□-25G (NO FAN)

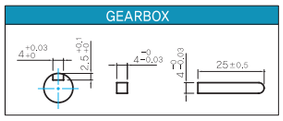


● GEARBOX MODEL:
8WD□BL/BR/BRL



● KEY SPEC

GEARBOX



WEIGHT

PART		WEIGHT(kg)
MOTOR		1.66
GEAR BOX	8GBK3BMH - 8GBK18BMH	0.56
	8GBK20BMH - 8GBK40BMH	0.65
	8GBK50BMH - 8GBK360BMH	0.72
	8WD□BL/BR/BRL	0.68
	8XD10○○	0.45

*The output flange and shaft are sold separately.

Motor Images

8SDD□-25	8SDG□-25G+8GBK□BMH	8SDG□-25W+8WD□BL

S.C. Induction Motor 40W (□ 90mm)

40W Speed Control Induction Motor 40W(□ 90mm)

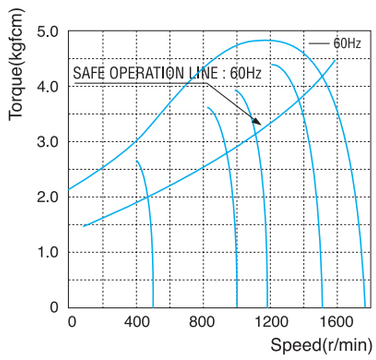
Motor Specification

Model 9SDG*-40□-C(L): Gear Type Shaft 9SDD*-40-C(L): D-Cut Type Shaft 9SDK*-40-C(L): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9SD◇1(A)-40□-C	9SD◇1(A)-40□-L	40	1ø110	60	4	Cont.	90-1700	1.80	0.180	2.70	0.270	0.80	0.080	10.0 / 250
9SD◇B-40□-C	9SD◇B-40□-L	40	1ø100	50	4	Cont.	90-1400	1.60	0.160	2.50	0.250	0.70	0.070	10.0 / 250
				60			90-1700	1.60	0.160	2.50	0.250	0.70	0.070	
9SD◇C-40□-C	9SD◇C-40□-L	40	1ø200	50	4	Cont.	90-1400	1.90	0.190	3.00	0.300	0.80	0.080	3.0 / 450
				60			90-1700	1.90	0.190	2.80	0.280	0.80	0.080	
9SD◇2(D)-40□-C	9SD◇2(D)-40□-L	40	1ø220	60	4	Cont.	90-1700	1.80	0.180	2.70	0.270	0.80	0.080	2.5 / 450
9SD◇E-40□-C	9SD◇E-40□-L	40	1ø220	50	4	Cont.	90-1400	1.50	0.150	2.50	0.250	0.70	0.070	2.5 / 450
			1ø240					1.80	0.180	3.00	0.300	0.72	0.072	

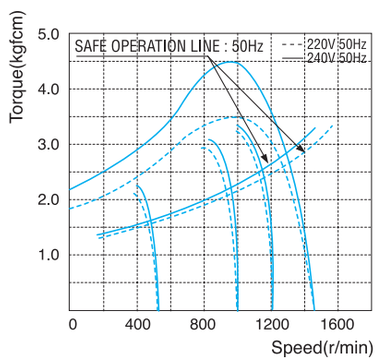
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Speed-Torque Characteristics

9SDG1(A)-40□ / 9SDG2(D)-40□



9SDGE-40□



Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	2	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
9SDG *-40G	9GBK□ BMH	1200	110	60	kgfcm	4.4	6.6	7.9	10.9	13.1	16.4	19.7	21.9	27.3	32.8	39.4	39.4	49.3	59.1	71.0	78.8	89.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					N.m	0.43	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.68	3.21	3.86	3.86	4.83	5.79	6.95	7.73	8.73	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
			220	60	kgfcm	4.4	6.6	7.9	10.9	13.1	16.4	19.7	21.9	27.3	32.8	39.4	39.4	49.3	59.1	71.0	78.8	89.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					N.m	0.43	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.68	3.21	3.86	3.86	4.83	5.79	6.95	7.73	8.73	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
			220/240	50	kgfcm	4.1	6.1	7.3	10.1	12.2	15.2	18.2	20.3	25.3	30.4	36.5	36.5	45.6	54.8	65.7	73.0	82.5	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					N.m	0.40	0.60	0.71	0.99	1.19	1.49	1.79	1.98	2.48	2.98	3.57	3.58	4.47	5.37	6.44	7.15	8.09	9.70	9.80	9.80	9.80	9.80	9.80	9.80	9.80
		90	110	60	kgfcm	1.3	1.9	2.3	3.2	3.9	4.9	5.8	6.5	8.1	9.7	11.7	11.7	14.6	17.5	21.0	23.4	26.4	31.7	39.6	47.5	52.8	63.4	79.2	95.0	100.0
					N.m	0.13	0.19	0.23	0.32	0.38	0.48	0.57	0.64	0.79	0.95	1.14	1.14	1.43	1.72	2.06	2.29	2.59	3.10	3.88	4.66	5.17	6.21	7.76	9.31	9.80
			220	60	kgfcm	1.3	1.9	2.3	3.2	3.9	4.9	5.8	6.5	8.1	9.7	11.7	11.7	14.6	17.5	21.0	23.4	26.4	31.7	39.6	47.5	52.8	63.4	79.2	95.0	100.0
					N.m	0.13	0.19	0.23	0.32	0.38	0.48	0.57	0.64	0.79	0.95	1.14	1.14	1.43	1.72	2.06	2.29	2.59	3.10	3.88	4.66	5.17	6.21	7.76	9.31	9.80
			220/240	50	kgfcm	1.1	1.7	2.0	2.8	3.4	4.3	5.1	5.7	7.1	8.5	10.2	10.2	12.8	15.3	18.4	20.4	23.1	27.7	34.7	41.6	46.2	55.4	69.3	83.2	92.4
					N.m	0.11	0.17	0.20	0.28	0.33	0.42	0.50	0.56	0.69	0.83	1.00	1.00	1.25	1.50	1.80	2.00	2.26	2.72	3.40	4.07	4.53	5.43	6.79	8.15	9.06

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30
9SDG*-40P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	4.4	6.6	7.9	10.9	13.1	16.4	19.7	21.9	24.6	29.6	35.5	39.4	44.6	53.5
					N.m	0.43	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.41	2.90	3.48	3.86	4.37	5.24
			220	60	kgfcm	4.4	6.6	7.9	10.9	13.1	16.4	19.7	21.9	24.6	29.6	35.5	39.4	44.6	53.5
					N.m	0.43	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.41	2.90	3.48	3.86	4.37	5.24
			220/240	50	kgfcm	4.1	6.1	7.3	10.1	12.2	15.2	18.2	20.3	22.8	27.4	32.9	36.5	41.3	49.5
					N.m	0.40	0.60	0.71	0.99	1.19	1.49	1.79	1.98	2.24	2.68	3.22	3.58	4.04	4.85
		90	110	60	kgfcm	1.3	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.3	8.8	10.5	11.7	13.2	15.8
					N.m	0.13	0.19	0.23	0.32	0.38	0.48	0.57	0.64	0.72	0.86	1.03	1.14	1.29	1.55
			220	60	kgfcm	1.3	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.3	8.8	10.5	11.7	13.2	15.8
					N.m	0.13	0.19	0.23	0.32	0.38	0.48	0.57	0.64	0.72	0.86	1.03	1.14	1.29	1.55
			220/240	50	kgfcm	1.1	1.7	2.0	2.8	3.4	4.3	5.1	5.7	6.4	7.7	9.2	10.2	11.6	13.9
					N.m	0.11	0.17	0.20	0.28	0.33	0.42	0.50	0.56	0.63	0.75	0.90	1.00	1.13	1.36

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	36	40	50	60	75	90	100	120	150	180	200
9SDG*-40P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	64.2	71.3	89.1	106.9	119.5	143.4	159.3	191.2	200.0	200.0	200.0
					N.m	6.29	6.99	8.73	10.48	11.71	14.05	15.61	18.73	19.60	19.60	19.60
			220	60	kgfcm	64.2	71.3	89.1	106.9	119.5	143.4	159.3	191.2	200.0	200.0	200.0
					N.m	6.29	6.99	8.73	10.48	11.71	14.05	15.61	18.73	19.60	19.60	19.60
			220/240	50	kgfcm	59.4	66.0	82.5	99.0	110.6	132.8	147.5	177.0	200.0	200.0	200.0
					N.m	5.82	6.47	8.09	9.70	10.84	13.01	14.46	17.35	19.60	19.60	19.60
		90	110	60	kgfcm	19.0	21.1	26.4	31.7	35.4	42.5	47.2	56.6	70.8	85.0	94.4
					N.m	1.86	2.07	2.59	3.10	3.47	4.16	4.63	5.55	6.94	8.33	9.25
			220	60	kgfcm	19.0	21.1	26.4	31.7	35.4	42.5	47.2	56.6	70.8	85.0	94.4
					N.m	1.86	2.07	2.59	3.10	3.47	4.16	4.63	5.55	6.94	8.33	9.25
			220/240	50	kgfcm	16.6	18.5	23.1	27.7	31.0	37.2	41.3	49.6	62.0	74.3	82.6
					N.m	1.63	1.81	2.26	2.72	3.04	3.64	4.05	4.86	6.07	7.29	8.09

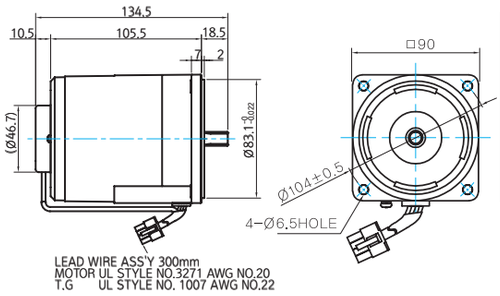
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SDG*-40W	9WD□BL/□BR/□BRL	1200	110	60	kgfcm	22.1	25.9	31.2	36.0	47.3	53.5	62.2	81.0	89.1
					N.m	2.17	2.54	3.06	3.52	4.63	5.24	6.10	7.94	8.73
			220	60	kgfcm	22.4	26.9	33.6	40.3	56.0	67.2	80.7	112.1	122.4
					N.m	2.20	2.64	3.29	3.95	5.49	6.59	7.91	10.98	12.00
			220/240	50	kgfcm	24.6	28.8	34.7	40.0	52.5	59.4	69.1	90.0	99.0
					N.m	2.41	2.82	3.40	3.92	5.15	5.82	6.77	8.82	9.70
		90	110	60	kgfcm	6.6	7.7	9.2	10.7	14.0	15.8	18.4	24.0	26.4
					N.m	0.64	0.75	0.91	1.04	1.37	1.55	1.81	2.35	2.59
			220	60	kgfcm	6.6	7.7	9.2	10.7	14.0	15.8	18.4	24.0	26.4
					N.m	0.64	0.75	0.91	1.04	1.37	1.55	1.81	2.35	2.59
			220/240	50	kgfcm	5.9	6.9	8.3	9.6	12.6	14.3	16.6	21.6	23.8
					N.m	0.58	0.68	0.81	0.94	1.23	1.40	1.63	2.12	2.33

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
: a white background indicates the rotation in the opposite direction.

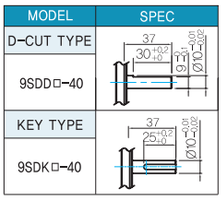
Dimensions

MOTOR ONLY

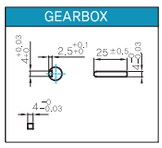
- MOTOR MODEL: 9SD□□-40(NO FAN)



- MOTOR OUTPUT SHAFT

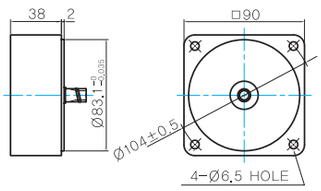
MODEL	SPEC
D-CUT TYPE	
9SDD□-40	
KEY TYPE	
9SDK□-40	

- KEY SPEC



INTER-DECIMAL GEARBOX

- MODEL: 9XD10□□



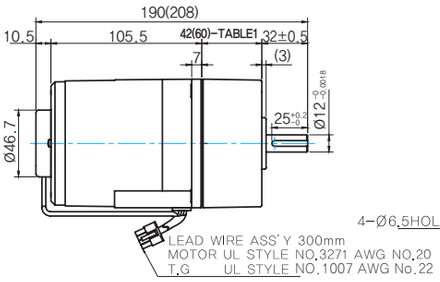
B AC Motors

S.C. Induction Motor 40W (□90mm)

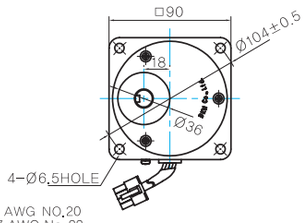
GEARED MOTOR

G TYPE GEARBOX

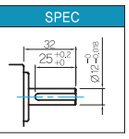
- MOTOR MODEL: 9SDG□–40G (NO FAN)



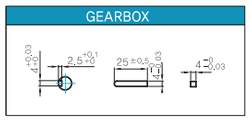
- GEARBOX MODEL: 9GBK□BMH



- GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9GBK□BMH	

- KEY SPEC

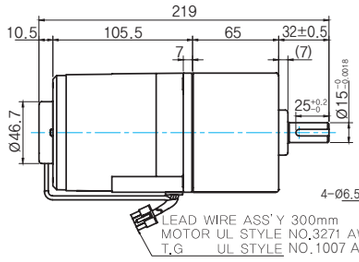
GEARBOX


- 42(60)-Table1

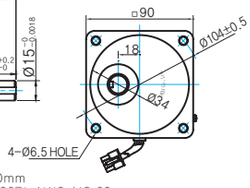
SIZE(mm)	GEAR RATIO
42	9GBK2BMH – 9GBK18BMH
60	9GBK20BMH – 9GBK200BMH

P TYPE GEARBOX

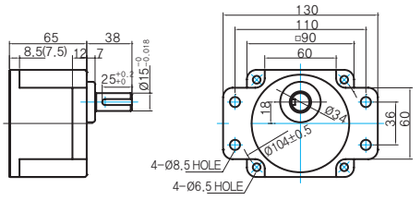
- MOTOR MODEL: 9SDG□– 40P (NO FAN)



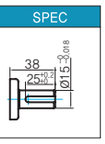
- GEARBOX MODEL: 9PBK□BH



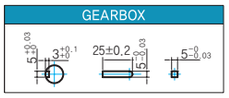
- GEARBOX MODEL: 9PFK□BH



- GEARBOX OUTPUT SHAFT

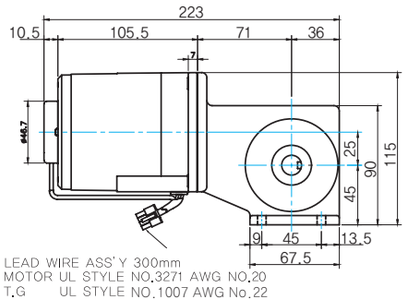
MODEL	SPEC
D–CUT TYPE	
9PBK□BH 9PFK□BH	

- KEY SPEC

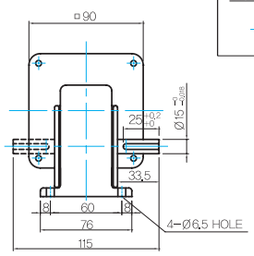
GEARBOX


W TYPE GEARBOX

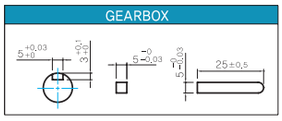
- MOTOR MODEL: 9SDG□–40W (NO FAN)



- GEARBOX MODEL: 9WD□BL/BR/BRL



- KEY SPEC

GEARBOX


WEIGHT

PART		WEIGHT(kg)
MOTOR		2.55
GEAR BOX	9GBK2BMH – 9GBK18BMH	0.78
	9GBK20BMH – 9GBK40BMH	1.10
	9GBK50BMH – 9GBK200BMH	1.20
	9PB(F)K2BH – 9PB(F)K10BH	1.28
	9PB(F)K12.5BH – 9PB(F)K20BH	1.30
	9PB(F)K25BH – 9PB(F)K60BH	1.45
	9PB(F)K75BH – 9PB(F)K200BH	1.47
	9WD□BL/BR/BRL	1.00
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9SDD□–40	9SDG□–40G+9GBK□BMH	9SDG□–40P+9PBK□BH	9SDG□–40W+9WD□BL

60W Speed Control Induction Motor 60W(□ 90mm)

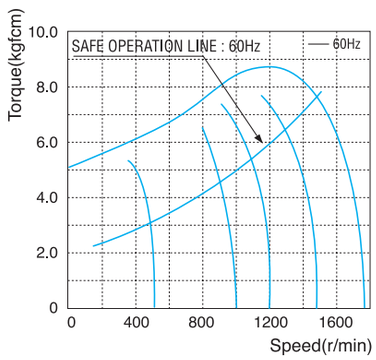
Motor Specification

Model 9SDG*-60F2□-C(L): Gear Type Shaft 9SDD*-60F2-C(L): D-Cut Type Shaft 9SDK*-60F2-C(L): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9SD◇1(A)-60F2□-C	9SD◇1(A)-60F2□-L	60	1ø110	60	4	Cont.	90-1700	4.00	0.400	5.50	0.550	1.60	0.160	16.0 / 250
9SD◇B-60F2□-C	9SD◇B-60F2□-L	60	1ø100	50	4	Cont.	90-1400	4.20	0.420	5.50	0.550	1.50	0.150	20.0 / 250
				60			90-1700	4.00	0.400	5.50	0.550	1.60	0.160	
9SD◇C-60F2□-C	9SD◇C-60F2□-L	60	1ø200	50	4	Cont.	90-1400	4.20	0.420	5.50	0.550	1.50	0.150	5.0 / 450
				60			90-1700	4.00	0.400	5.50	0.550	1.60	0.160	
9SD◇2(D)-60F2□-C	9SD◇2(D)-60F2□-L	60	1ø220	60	4	Cont.	90-1700	4.00	0.400	5.50	0.550	1.60	0.160	5.0 / 450
9SD◇E-60F2□-C	9SD◇E-60F2□-L	60	1ø220	50	4	Cont.	90-1400	4.00	0.400	5.20	0.520	1.40	0.140	5.0 / 450
			1ø240					4.50	0.450	5.80	0.580	1.60	0.160	

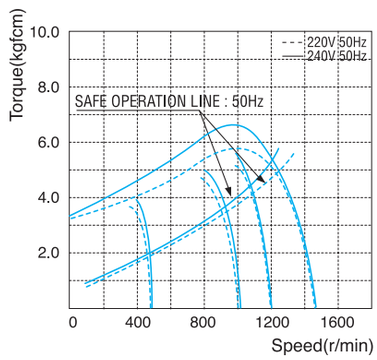
1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only. 3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached. 4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Speed-Torque Characteristics

9SDG1(A)-60F2□ / 9SDG2(D)-60F2□



9SDGE-60F2□



Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	2	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
9SDG*-60F2P	9PBK □BH	1200	110	60	kgfcm	8.9	13.4	16.0	22.3	26.7	33.4	40.1	44.6	50.2	60.2	72.3	80.3	90.8	108.9	130.7	145.2	181.5	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	0.87	1.31	1.57	2.18	2.62	3.27	3.93	4.37	4.92	5.90	7.08	7.87	8.89	10.67	12.81	14.23	17.79	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	8.9	13.4	16.0	22.3	26.7	33.4	40.1	44.6	50.2	60.2	72.3	80.3	90.8	108.9	130.7	145.2	181.5	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	0.87	1.31	1.57	2.18	2.62	3.27	3.93	4.37	4.92	5.90	7.08	7.87	8.89	10.67	12.81	14.23	17.79	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	8.4	12.6	15.2	21.1	25.3	31.6	37.9	42.1	47.5	56.9	68.3	75.9	85.8	103.0	123.6	137.3	171.6	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	0.83	1.24	1.49	2.06	2.48	3.10	3.71	4.13	4.65	5.58	6.70	7.44	8.41	10.09	12.11	13.45	16.82	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
	9PFK □BH	90	110	60	kgfcm	2.6	3.9	4.7	6.5	7.8	9.7	11.7	13.0	14.6	17.5	21.0	23.4	26.4	31.7	38.0	42.2	52.8	63.4	70.8	85.0	94.4	113.3	141.6	169.9	188.8
					N.m	0.25	0.38	0.46	0.64	0.76	0.95	1.14	1.27	1.43	1.72	2.06	2.29	2.59	3.10	3.73	4.14	5.17	6.21	6.94	8.33	9.25	11.10	13.88	16.65	18.50
			220	60	kgfcm	2.6	3.9	4.7	6.5	7.8	9.7	11.7	13.0	14.6	17.5	21.0	23.4	26.4	31.7	38.0	42.2	52.8	63.4	70.8	85.0	94.4	113.3	141.6	169.9	188.8
					N.m	0.25	0.38	0.46	0.64	0.76	0.95	1.14	1.27	1.43	1.72	2.06	2.29	2.59	3.10	3.73	4.14	5.17	6.21	6.94	8.33	9.25	11.10	13.88	16.65	18.50
			220/240	50	kgfcm	2.3	3.4	4.1	5.7	6.8	8.5	10.2	11.3	12.8	15.3	18.4	20.4	23.1	27.7	33.3	37.0	46.2	55.4	62.0	74.3	82.6	99.1	123.9	148.7	165.2
					N.m	0.22	0.33	0.40	0.56	0.67	0.83	1.00	1.11	1.25	1.50	1.80	2.00	2.26	2.72	3.26	3.62	4.53	5.43	6.07	7.29	8.09	9.71	12.14	14.57	16.19

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
: a white background indicates the rotation in the opposite direction.

B AC Motors

S.C. Induction Motor 60W (□90mm)

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
9SDG*-60F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	13.4	16.0	22.3	26.7	33.4	40.1	44.6	50.2	60.2	72.3	80.3	90.8
					N.m	1.31	1.57	2.18	2.62	3.27	3.93	4.37	4.92	5.90	7.08	7.87	8.89
			220	60	kgfcm	13.4	16.0	22.3	26.7	33.4	40.1	44.6	50.2	60.2	72.3	80.3	90.8
					N.m	1.31	1.57	2.18	2.62	3.27	3.93	4.37	4.92	5.90	7.08	7.87	8.89
			220/240	50	kgfcm	12.6	15.2	21.1	25.3	31.6	37.9	42.1	47.5	56.9	68.3	75.9	85.8
					N.m	1.24	1.49	2.06	2.48	3.10	3.71	4.13	4.65	5.58	6.70	7.44	8.41
		90	110	60	kgfcm	3.9	4.7	6.5	7.8	9.7	11.7	13.0	14.6	17.5	21.0	23.4	26.4
					N.m	0.38	0.46	0.64	0.76	0.95	1.14	1.27	1.43	1.72	2.06	2.29	2.59
			220	60	kgfcm	3.9	4.7	6.5	7.8	9.7	11.7	13.0	14.6	17.5	21.0	23.4	26.4
					N.m	0.38	0.46	0.64	0.76	0.95	1.14	1.27	1.43	1.72	2.06	2.29	2.59
			220/240	50	kgfcm	3.4	4.1	5.7	6.8	8.5	10.2	11.3	12.8	15.3	18.4	20.4	23.1
					N.m	0.33	0.40	0.56	0.67	0.83	1.00	1.11	1.25	1.50	1.80	2.00	2.26

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200
9SDG*-60F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	108.9	130.7	145.2	181.5	217.8	243.4	292.1	300.0	300.0	300.0	300.0	300.0
					N.m	10.67	12.81	14.23	17.79	21.34	23.85	28.62	29.40	29.40	29.40	29.40	29.40
			220	60	kgfcm	108.9	130.7	145.2	181.5	217.8	243.4	292.1	300.0	300.0	300.0	300.0	300.0
					N.m	10.67	12.81	14.23	17.79	21.34	23.85	28.62	29.40	29.40	29.40	29.40	29.40
			220/240	50	kgfcm	103.0	123.6	137.3	171.6	205.9	230.1	276.1	300.0	300.0	300.0	300.0	300.0
					N.m	10.09	12.11	13.45	16.82	20.18	22.55	27.06	29.40	29.40	29.40	29.40	29.40
		90	110	60	kgfcm	31.7	38.0	42.2	52.8	63.4	70.8	85.0	94.4	113.3	141.6	169.9	188.8
					N.m	3.10	3.73	4.14	5.17	6.21	6.94	8.33	9.25	11.10	13.88	16.65	18.50
			220	60	kgfcm	31.7	38.0	42.2	52.8	63.4	70.8	85.0	94.4	113.3	141.6	169.9	188.8
					N.m	3.10	3.73	4.14	5.17	6.21	6.94	8.33	9.25	11.10	13.88	16.65	18.50
			220/240	50	kgfcm	27.7	33.3	37.0	46.2	55.4	62.0	74.3	82.6	99.1	123.9	148.7	165.2
					N.m	2.72	3.26	3.62	4.53	5.43	6.07	7.29	8.09	9.71	12.14	14.57	16.19

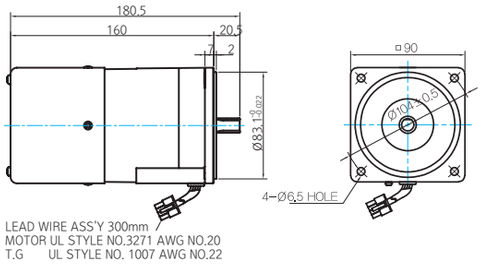
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SDG*-60F2W	9WD□BL/□BR/□BRL	1200	110	60	kgfcm	45.1	52.8	63.5	73.3	96.3	108.9	126.7	142.9	122.4
					N.m	4.42	5.17	6.23	7.18	9.43	10.67	12.42	14.00	12.00
			220	60	kgfcm	45.1	52.8	63.5	73.3	96.3	108.9	126.7	142.9	122.4
					N.m	4.42	5.17	6.23	7.18	9.43	10.67	12.42	14.00	12.00
			220/240	50	kgfcm	47.6	55.7	67.0	77.3	101.5	114.8	133.6	142.9	122.4
					N.m	4.66	5.46	6.57	7.57	9.95	11.25	13.10	14.00	12.00
		90	110	60	kgfcm	13.1	15.4	18.5	21.3	28.0	31.7	36.9	48.0	52.8
					N.m	1.29	1.51	1.81	2.09	2.74	3.10	3.61	4.70	5.17
			220	60	kgfcm	13.1	15.4	18.5	21.3	28.0	31.7	36.9	48.0	52.8
					N.m	1.29	1.51	1.81	2.09	2.74	3.10	3.61	4.70	5.17
			220/240	50	kgfcm	13.1	15.4	18.5	21.3	28.0	31.7	36.9	48.0	52.8
					N.m	1.29	1.51	1.81	2.09	2.74	3.10	3.61	4.70	5.17

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	5	7.5	10	15	20	25	30	40	50	60	80
9SDG*-60F2WH	9WHD□-030	1200	110	60	kgfcm	19.1	27.7	35.6	50.2	63.4	72.6	84.5	103.8	118.8	132.0	132.7
					N.m	1.88	2.72	3.49	4.92	6.21	7.11	8.28	10.18	11.64	12.94	13.00
			220	60	kgfcm	19.1	27.7	35.6	50.2	63.4	72.6	84.5	103.8	118.8	132.0	132.7
					N.m	1.88	2.72	3.49	4.92	6.21	7.11	8.28	10.18	11.64	12.94	13.00
			220/240	50	kgfcm	20.2	29.2	37.6	52.9	66.8	76.6	89.1	109.5	125.3	139.2	132.7
					N.m	1.98	2.86	3.68	5.18	6.55	7.50	8.73	10.73	12.28	13.64	13.00
		90	110	60	kgfcm	7.0	10.1	13.0	18.2	23.0	26.4	30.7	37.8	43.2	48.0	56.3
					N.m	0.68	0.99	1.27	1.79	2.26	2.59	3.01	3.70	4.23	4.70	5.52
			220	60	kgfcm	7.0	10.1	13.0	18.2	23.0	26.4	30.7	37.8	43.2	48.0	56.3
					N.m	0.68	0.99	1.27	1.79	2.26	2.59	3.01	3.70	4.23	4.70	5.52
			220/240	50	kgfcm	7.0	10.1	13.0	18.2	23.0	26.4	30.7	37.8	43.2	48.0	56.3
					N.m	0.68	0.99	1.27	1.79	2.26	2.59	3.01	3.70	4.23	4.70	5.52

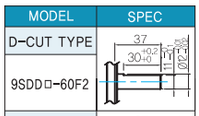
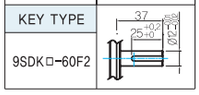
Dimensions

MOTOR ONLY

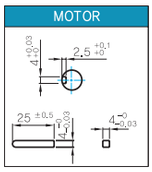
● MOTOR MODEL:
9SD□□-60F2 (POWERFUL FAN)



● MOTOR OUTPUT SHAFT

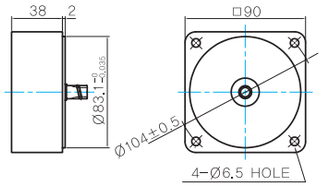
MODEL	SPEC
D-CUT TYPE	
9SDD□-60F2	
KEY TYPE	
9SDK□-60F2	

● KEY SPEC



INTER-DECIMAL GEARBOX

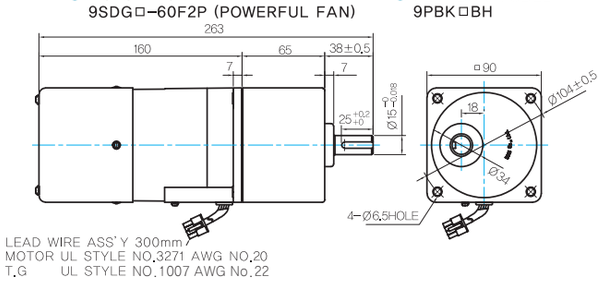
● MODEL: 9XD10□□



GEARED MOTOR

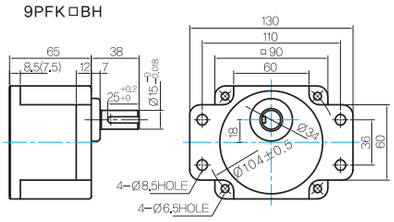
P TYPE GEARBOX

● MOTOR MODEL:
9SDG□-60F2P (POWERFUL FAN)

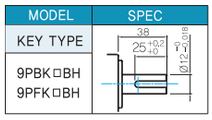


● GEARBOX MODEL:
9PBK□BH

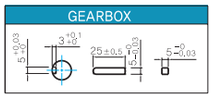
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

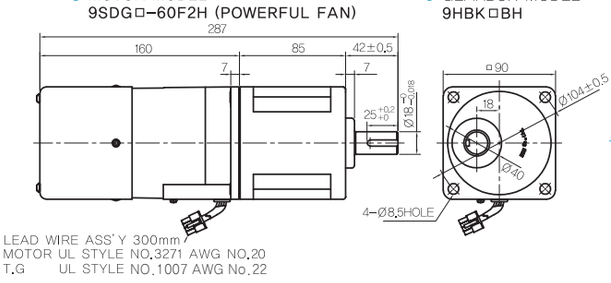
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC



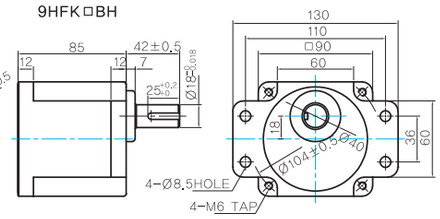
H TYPE GEARBOX

● MOTOR MODEL:
9SDG□-60F2H (POWERFUL FAN)

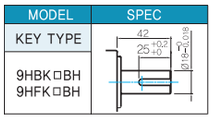


● GEARBOX MODEL:
9HBK□BH

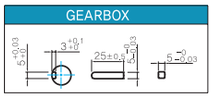
● GEARBOX MODEL:
9HFK□BH



● GEARBOX OUTPUT SHAFT

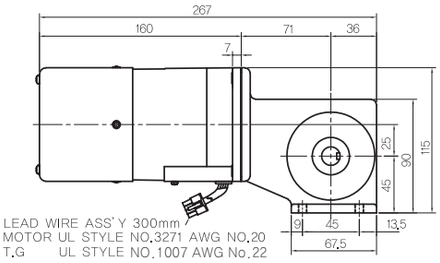
MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC

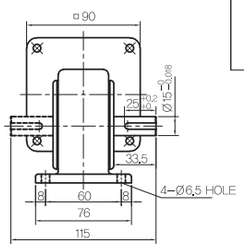


W TYPE GEARBOX

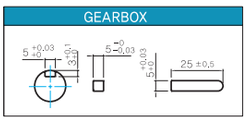
● MOTOR MODEL:
9SDG□-60F2W (POWERFUL FAN)



● GEARBOX MODEL:
9WD□BL/BR/BRL



● KEY SPEC

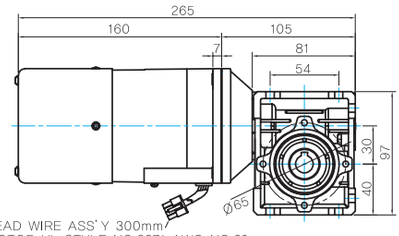


B AC Motors

S.C. Induction Motor 60W (□90mm)

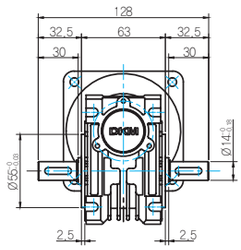
WH TYPE GEARBOX

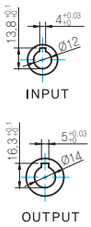
● MOTOR MODEL:
9SDG□-60F2WH (POWERFUL FAN)



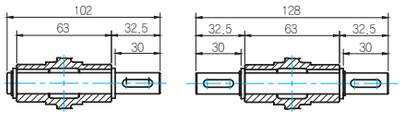
LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9WHD□-030



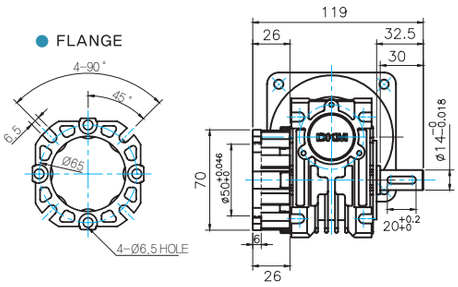


● SHAFT

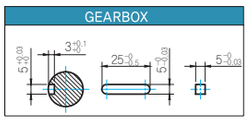


Unidirectional Bi-directional

● FLANGE



● KEY SPEC



WEIGHT

PART		WEIGHT(kg)
MOTOR		3.15
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WD□BL/BR/BRL	1.00
	9WHD□-030	1.20
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9SDD□-60F2	9SDG□-60F2P+9PBK□BH	9SDG□-60F2P+9PFK□BH	9SDG□-60F2H+9HBK□BH

9SDG□-60F2H+9HFK□BH	9SDG□-60F2W+9WD□BL	9SDG□-60F2WH+9WHD□-030

90W Speed Control Induction Motor 90W(□ 90mm)

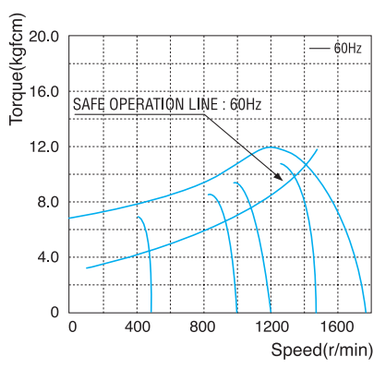
Motor Specification

Model 9SDG*-90F2□-C(L): Gear Type Shaft 9SDD*-90F2-C(L): D-Cut Type Shaft 9SDK*-60F2-C(L): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9SD◇1(A)-90F2□-C	9SD◇1(A)-90F2□-L	90	1ø110	60	4	Cont.	90-1700	4.50	0.450	6.30	0.630	2.30	0.230	20.0 / 250
9SD◇B-90F2□-C	9SD◇B-90F2□-L	90	1ø100	50	4	Cont.	90-1400	4.70	0.470	5.80	0.580	2.20	0.220	25.0 / 250
				60			90-1700	4.50	0.450	6.30	0.630	2.30	0.230	
9SD◇C-90F2□-C	9SD◇C-90F2□-L	90	1ø200	50	4	Cont.	90-1400	4.70	0.470	5.80	0.580	2.20	0.220	6.0 / 450
				60			90-1700	4.50	0.450	6.30	0.630	2.30	0.230	
9SD◇2(D)-90F2□-C	9SD◇2(D)-90F2□-L	90	1ø220	60	4	Cont.	90-1700	4.50	0.450	6.30	0.630	2.30	0.230	6.0 / 450
9SD◇E-90F2□-C	9SD◇E-90F2□-L	90	1ø220	50	4	Cont.	90-1400	4.50	0.450	5.40	0.540	2.20	0.220	6.0 / 450
			1ø240					5.00	0.500	6.10	0.610	2.30	0.230	

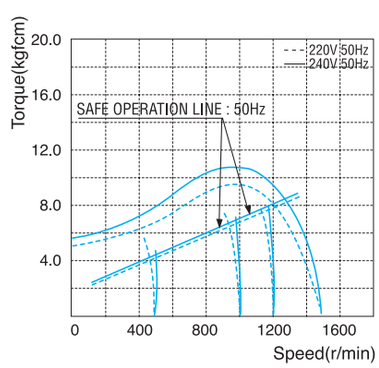
1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only. 3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached. 4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Speed-Torque Characteristics

9SDG1(A)-90F2□ / 9SDG2(D)-90F2□



9SDGE-90F2□



Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	2	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
9SDG*-90F2P	9PBK □BH	1200	110	60	kgfcm	10.2	15.3	18.4	25.5	30.6	38.3	45.9	51.0	57.5	69.0	82.8	92.0	104.0	124.7	149.7	166.3	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	1.00	1.50	1.80	2.50	3.00	3.75	4.50	5.00	5.63	6.76	8.11	9.01	10.19	12.22	14.67	16.30	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	10.2	15.3	18.4	25.5	30.6	38.3	45.9	51.0	57.5	69.0	82.8	92.0	104.0	124.7	149.7	166.3	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	1.00	1.50	1.80	2.50	3.00	3.75	4.50	5.00	5.63	6.76	8.11	9.01	10.19	12.22	14.67	16.30	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	8.7	13.1	15.7	21.9	26.2	32.8	39.4	43.7	49.3	59.1	71.0	78.8	89.1	106.9	128.3	142.6	178.2	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	0.86	1.29	1.54	2.14	2.57	3.21	3.86	4.29	4.83	5.79	6.95	7.73	8.73	10.48	12.57	13.97	17.46	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
	9PFK □BH	90	110	60	kgfcm	3.7	5.6	6.7	9.3	11.2	14.0	16.8	18.6	21.0	25.2	30.2	33.6	38.0	45.5	54.6	60.7	75.9	91.1	101.8	122.1	135.7	162.8	200.0	200.0	200.0
					N.m	0.37	0.55	0.66	0.91	1.10	1.37	1.64	1.83	2.06	2.47	2.96	3.29	3.72	4.46	5.36	5.95	7.44	8.93	9.97	11.97	13.30	15.96	19.60	19.60	19.60
			220	60	kgfcm	3.7	5.6	6.7	9.3	11.2	14.0	16.8	18.6	21.0	25.2	30.2	33.6	38.0	45.5	54.6	60.7	75.9	91.1	101.8	122.1	135.7	162.8	200.0	200.0	200.0
					N.m	0.37	0.55	0.66	0.91	1.10	1.37	1.64	1.83	2.06	2.47	2.96	3.29	3.72	4.46	5.36	5.95	7.44	8.93	9.97	11.97	13.30	15.96	19.60	19.60	19.60
			220/240	50	kgfcm	3.6	5.3	6.4	8.9	10.7	13.4	16.0	17.8	20.1	24.1	28.9	32.1	36.3	43.6	52.3	58.1	72.6	87.1	97.4	116.8	129.8	155.8	194.7	200.0	200.0
					N.m	0.35	0.52	0.63	0.87	1.05	1.31	1.57	1.75	1.97	2.36	2.83	3.15	3.56	4.27	5.12	5.69	7.11	8.54	9.54	11.45	12.72	15.26	19.08	19.60	19.60

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
; a white background indicates the rotation in the opposite direction.

B AC Motors

S.C. Induction Motor 90W (□ 90mm)

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
9SDG*-90F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	15.3	18.4	25.5	30.6	38.3	45.9	51.0	57.5	69.0	82.8	92.0	104.0
					N.m	1.50	1.80	2.50	3.00	3.75	4.50	5.00	5.63	6.76	8.11	9.01	10.19
			220	60	kgfcm	15.3	18.4	25.5	30.6	38.3	45.9	51.0	57.5	69.0	82.8	92.0	104.0
					N.m	1.50	1.80	2.50	3.00	3.75	4.50	5.00	5.63	6.76	8.11	9.01	10.19
			220/240	50	kgfcm	13.1	15.7	21.9	26.2	32.8	39.4	43.7	49.3	59.1	71.0	78.8	89.1
					N.m	1.29	1.54	2.14	2.57	3.21	3.86	4.29	4.83	5.79	6.95	7.73	8.73
		90	110	60	kgfcm	5.6	6.7	9.3	11.2	14.0	16.8	18.6	21.0	25.2	30.2	33.6	38.0
					N.m	0.55	0.66	0.91	1.10	1.37	1.64	1.83	2.06	2.47	2.96	3.29	3.72
			220	60	kgfcm	5.6	6.7	9.3	11.2	14.0	16.8	18.6	21.0	25.2	30.2	33.6	38.0
					N.m	0.55	0.66	0.91	1.10	1.37	1.64	1.83	2.06	2.47	2.96	3.29	3.72
			220/240	50	kgfcm	5.3	6.4	8.9	10.7	13.4	16.0	17.8	20.1	24.1	28.9	32.1	36.3
					N.m	0.52	0.63	0.87	1.05	1.31	1.57	1.75	1.97	2.36	2.83	3.15	3.56

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200
9SDG*-90F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	124.7	149.7	166.3	207.9	249.5	278.8	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	12.22	14.67	16.30	20.37	24.45	27.32	29.40	29.40	29.40	29.40	29.40	29.40
			220	60	kgfcm	124.7	149.7	166.3	207.9	249.5	278.8	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	12.22	14.67	16.30	20.37	24.45	27.32	29.40	29.40	29.40	29.40	29.40	29.40
			220/240	50	kgfcm	106.9	128.3	142.6	178.2	213.8	239.0	286.7	300.0	300.0	300.0	300.0	300.0
					N.m	10.48	12.57	13.97	17.46	20.96	23.42	28.10	29.40	29.40	29.40	29.40	29.40
		90	110	60	kgfcm	45.5	54.6	60.7	75.9	91.1	101.8	122.1	135.7	162.8	203.6	244.3	271.4
					N.m	4.46	5.36	5.95	7.44	8.93	9.97	11.97	13.30	15.96	19.95	23.94	26.60
			220	60	kgfcm	45.5	54.6	60.7	75.9	91.1	101.8	122.1	135.7	162.8	203.6	244.3	271.4
					N.m	4.46	5.36	5.95	7.44	8.93	9.97	11.97	13.30	15.96	19.95	23.94	26.60
			220/240	50	kgfcm	43.6	52.3	58.1	72.6	87.1	97.4	116.8	129.8	155.8	194.7	233.6	259.6
					N.m	4.27	5.12	5.69	7.11	8.54	9.54	11.45	12.72	15.26	19.08	22.90	25.44

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SDG*-90F2W	9WD□BL/□BR/□BRL	1200	110	60	kgfcm	51.7	60.5	72.8	83.9	110.3	124.7	145.2	142.9	122.4
					N.m	5.06	5.93	7.13	8.22	10.80	12.22	14.22	14.00	12.00
			220	60	kgfcm	51.7	60.5	72.8	83.9	110.3	124.7	145.2	142.9	122.4
					N.m	5.06	5.93	7.13	8.22	10.80	12.22	14.22	14.00	12.00
			220/240	50	kgfcm	50.0	58.6	70.5	81.3	106.8	120.8	140.5	142.9	122.4
					N.m	4.90	5.74	6.90	7.96	10.46	11.84	13.77	14.00	12.00
		90	110	60	kgfcm	18.9	22.1	26.6	30.6	40.3	45.5	53.0	69.0	75.9
					N.m	1.85	2.16	2.60	3.00	3.94	4.46	5.19	6.76	7.44
			220	60	kgfcm	18.9	22.1	26.6	30.6	40.3	45.5	53.0	69.0	75.9
					N.m	1.85	2.16	2.60	3.00	3.94	4.46	5.19	6.76	7.44
			220/240	50	kgfcm	18.9	22.1	26.6	30.6	40.3	45.5	53.0	69.0	75.9
					N.m	1.85	2.16	2.60	3.00	3.94	4.46	5.19	6.76	7.44

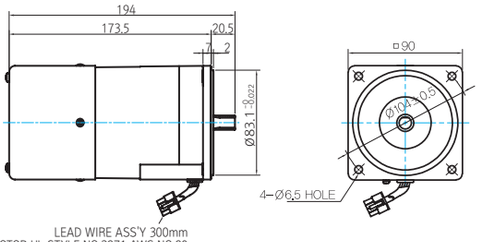
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	5	7.5	10	15	20	25	30	40	50	60	80
9SDG*-90F2WH	9WHD□-030	1200	110	60	kgfcm	21.9	31.8	40.8	57.5	72.6	83.2	96.8	118.9	136.1	151.2	132.7
					N.m	2.15	3.11	4.00	5.63	7.11	8.15	9.48	11.66	13.34	14.82	13.00
			220	60	kgfcm	21.9	31.8	40.8	57.5	72.6	83.2	96.8	118.9	136.1	151.2	132.7
					N.m	2.15	3.11	4.00	5.63	7.11	8.15	9.48	11.66	13.34	14.82	13.00
			220/240	50	kgfcm	21.2	30.7	39.5	55.6	70.3	80.5	93.7	115.2	131.8	146.4	132.7
					N.m	2.08	3.01	3.87	5.45	6.89	7.89	9.18	11.29	12.91	14.35	13.00
		90	110	60	kgfcm	8.0	11.6	14.9	21.0	26.5	30.4	35.3	43.4	49.7	55.2	64.8
					N.m	0.78	1.14	1.46	2.06	2.60	2.98	3.46	4.26	4.87	5.41	6.35
			220	60	kgfcm	8.0	11.6	14.9	21.0	26.5	30.4	35.3	43.4	49.7	55.2	64.8
					N.m	0.78	1.14	1.46	2.06	2.60	2.98	3.46	4.26	4.87	5.41	6.35
			220/240	50	kgfcm	8.0	11.6	14.9	21.0	26.5	30.4	35.3	43.4	49.7	55.2	64.8
					N.m	0.78	1.14	1.46	2.06	2.60	2.98	3.46	4.26	4.87	5.41	6.35

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	15	20	25	30	40	50	60	80	100	120	160	200	225	240
9SDG*-90F2HC	9HC□-◇	1200	110	60	kgfcm	69.0	92.0	115.0	138.0	184.0	230.0	276.0	368.0	460.0	552.0	736.0	920.0	1035.0	1104.0
					N.m	6.76	9.02	11.30	13.50	18.00	22.50	27.00	36.10	45.10	54.10	72.10	90.20	101.00	108.00
			220	60	kgfcm	69.0	92.0	115.0	138.0	184.0	230.0	276.0	368.0	460.0	552.0	736.0	920.0	1035.0	1104.0
					N.m	6.76	9.02	11.30	13.50	18.00	22.50	27.00	36.10	45.10	54.10	72.10	90.20	101.00	108.00
			220/240	50	kgfcm	59.1	78.8	98.6	118.0	158.0	197.0	237.0	315.0	394.0	473.0	631.0	788.0	887.0	946.0
					N.m	5.79	7.72	9.66	11.60	15.50	19.30	23.20	30.90	38.60	46.40	61.80	77.10	86.90	92.70
		90	110	60	kgfcm	25.2	33.6	42.0	50.4	67.2	84.0	101.0	134.0	168.0	201.0	269.0	336.0	378.0	403.0
					N.m	2.47	3.29	4.12	4.94	6.59	8.23	9.90	13.10	16.50	19.70	26.40	32.90	37.00	39.50
			220	60	kgfcm	25.2	33.6	42.0	50.4	67.2	84.0	101.0	134.0	168.0	201.0	269.0	336.0	378.0	403.0
					N.m	2.47	3.29	4.12	4.94	6.59	8.23	9.90	13.10	16.50	19.70	26.40	32.90	37.00	39.50
			220/240	50	kgfcm	24.1	32.1	40.2	48.2	64.2	80.3	96.4	128.0	161.0	193.0	257.0	321.0	361.0	385.0
					N.m	2.36	3.15	3.94	4.72	6.29	7.87	9.45	12.50	15.80	18.90	25.20	31.50	35.40	37.70

Dimensions

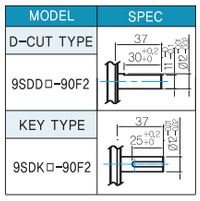
MOTOR ONLY

● MOTOR MODEL:
9SD□□-90F2 (POWERFUL FAN)



LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO. 1007 AWG NO.22

● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
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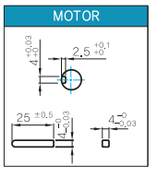
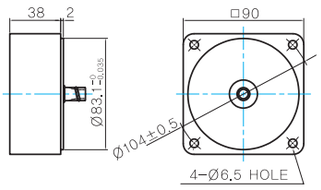
KEY TYPE	
9SDK□-90F2	

● KEY SPEC



INTER-DECIMAL GEARBOX

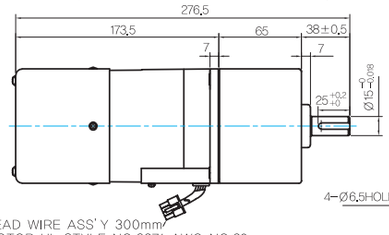
● MODEL: 9XD10□□



GEARED MOTOR

P TYPE GEARBOX

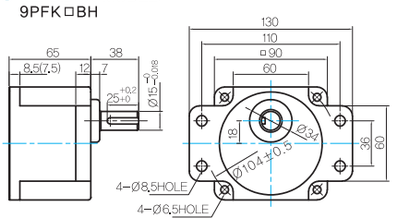
● MOTOR MODEL:
9SDG□-90F2P (POWERFUL FAN)



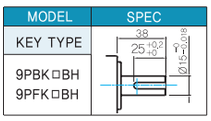
LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9PBK□BH

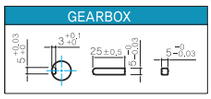
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

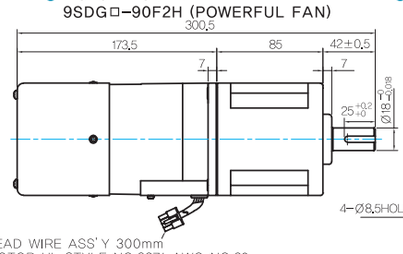
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC



H TYPE GEARBOX

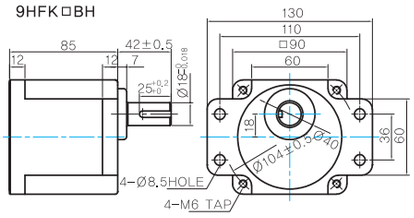
● MOTOR MODEL:
9SDG□-90F2H (POWERFUL FAN)



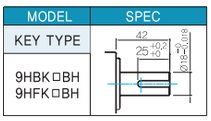
LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9HBK□BH

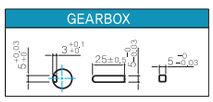
● GEARBOX MODEL:
9HFK□BH



● GEARBOX OUTPUT SHAFT

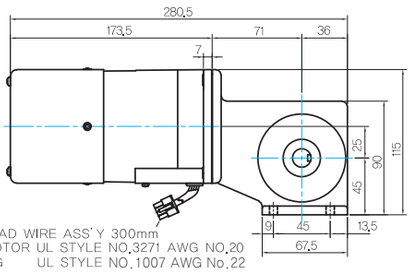
MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC



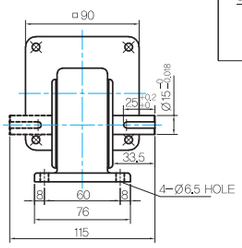
W TYPE GEARBOX

● MOTOR MODEL:
9SDG□-90F2W (POWERFUL FAN)

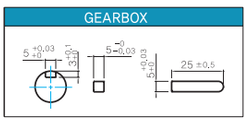


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9WD□BL/BR/BRL



● KEY SPEC

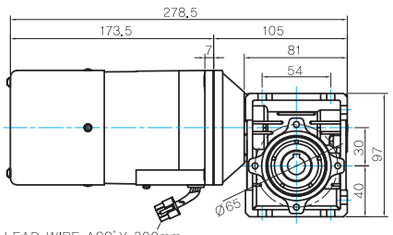


B AC Motors

S.C. Induction Motor 90W (□ 90mm)

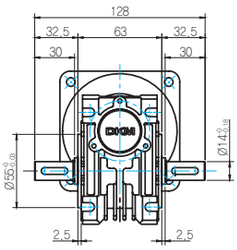
WH TYPE GEARBOX

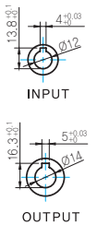
● MOTOR MODEL:
9SDG□-90F2WH (POWERFUL FAN)



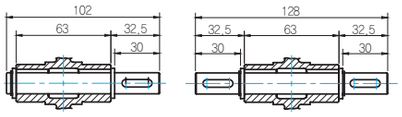
LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9WHD□-030



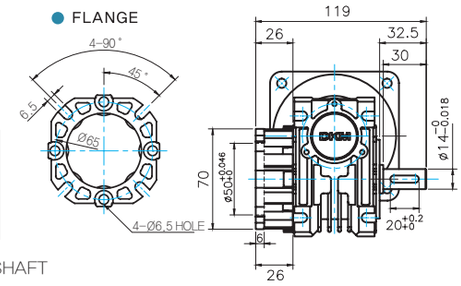


● SHAFT

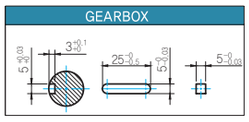


Unidirectional Bi-directional

● FLANGE

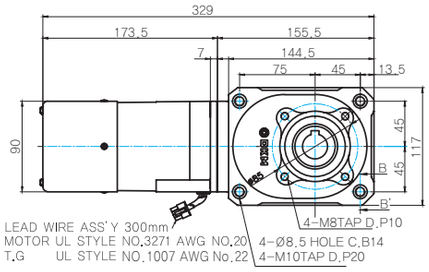


● KEY SPEC



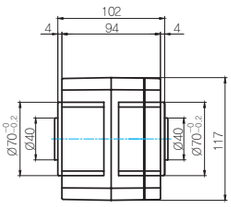
HC TYPE GEARBOX

● MOTOR MODEL :
9SDG□-90F2HC-□ (POWERFUL FAN)

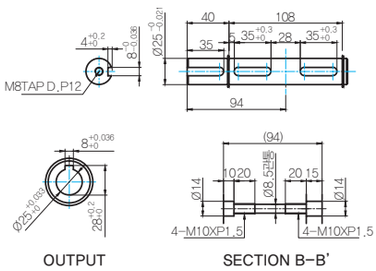


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

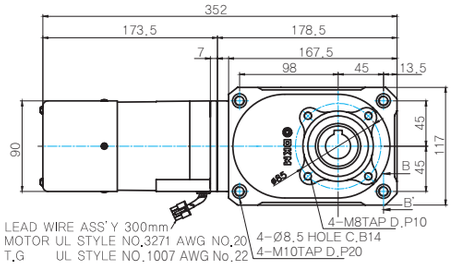
● GEARBOX MODEL :
9HC(15 ~ 60)□



● SHAFT

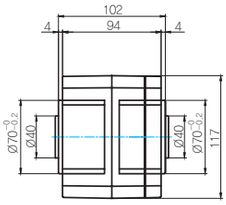


● MOTOR MODEL :
9SDG□-90F2HC-□ (POWERFUL FAN)

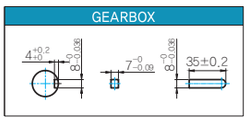


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL :
9HC(80 ~ 240)□



● KEY SPEC



WEIGHT

PART		WEIGHT(kg)
MOTOR		3.50
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WD□BL/BR/BRL	1.00
	9WHD□-030	1.20
	9HC15-◇	4.05
	9HC20-◇ - 9HC60-◇	4.10
	9HC80-◇ - 9HC240-◇	4.75
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9SDD□-90F2	9SDG□-90F2P+9PBK□BH	9SDG□-90F2P+9PFK□BH	9SDG□-90F2H+9HBK□BH
9SDG□-90F2H+9HFK□BH	**9SDG□-90F2W+9WD□BL**	**9SDG□-90F2WH+9WHD□-030**	**9SDG□-90F2HC+9HC□-◇**

120W

Speed Control
Induction Motor
120W(□ 90mm)

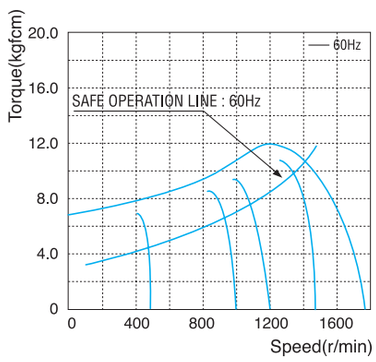
Motor Specification

Model 9SDG*-120F2□-C(L): Gear Type Shaft 9SDD*-120F2-C(L): D-Cut Type Shaft 9SDK*-120F2-C(L): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9SD◇1(A)-120F2□-C	9SD◇1(A)-120F2□-L	120	1ø 110	60	4	Cont.	90-1700	5.70	0.570	8.30	0.830	2.80	0.280	25.0 / 250
9SD◇2(D)-120F2□-C	9SD◇2(D)-120F2□-L	120	1ø 220	60	4	Cont.	90-1700	5.70	0.570	8.30	0.830	2.80	0.280	6.0 / 400
9SD◇E-120F2□-C	9SD◇E-120F2□-L	120	1ø 220	50	4	Cont.	90-1400	5.70	0.570	8.00	0.800	2.80	0.280	6.0 / 400
			1ø 240				90-1700	6.20	0.620	8.60	0.860	2.90	0.290	

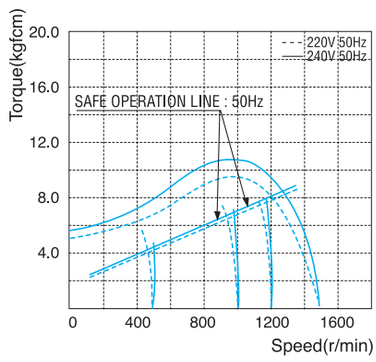
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, D, E contain a built-in thermal protector.

Speed-Torque Characteristics

9SDG1(A)-120F2□ / 9SDG2(D)-120F2□



9SDGE-120F2□



Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	2	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
9SDG*-120F2P	9PBK□BH / 9PFK□BH	1200	110	60	kgfcm	13.4	20.2	24.2	33.6	40.3	50.4	60.5	67.2	75.7	90.9	109.1	121.2	137.0	164.3	197.2	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	1.32	1.98	2.37	3.29	3.95	4.94	5.93	6.59	7.42	8.91	10.69	11.88	13.42	16.11	19.33	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	13.4	20.2	24.2	33.6	40.3	50.4	60.5	67.2	75.7	90.9	109.1	121.2	137.0	164.3	197.2	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	1.32	1.98	2.37	3.29	3.95	4.94	5.93	6.59	7.42	8.91	10.69	11.88	13.42	16.11	19.33	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	13.0	19.4	23.3	32.4	38.9	48.6	58.3	64.8	73.0	87.6	105.1	116.8	132.0	158.4	190.1	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	1.27	1.91	2.29	3.18	3.81	4.76	5.72	6.35	7.15	8.58	10.30	11.45	12.94	15.52	18.63	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
		90	110	60	kgfcm	4.5	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	200.0	200.0	200.0
					N.m	0.44	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	19.60	19.60	19.60
			220	60	kgfcm	4.5	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	200.0	200.0	200.0
					N.m	0.44	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	19.60	19.60	19.60
			220/240	50	kgfcm	4.5	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	200.0	200.0	200.0
					N.m	0.44	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	19.60	19.60	19.60

1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
: a white background indicates the 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

S.C. Induction Motor 120W (□90mm)

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
9SDG*-120F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	20.2	24.2	33.6	40.3	50.4	60.5	67.2	75.7	90.9	109.1	121.2	137.0
					N.m	1.98	2.37	3.29	3.95	4.94	5.93	6.59	7.42	8.91	10.69	11.88	13.42
			220	60	kgfcm	20.2	24.2	33.6	40.3	50.4	60.5	67.2	75.7	90.9	109.1	121.2	137.0
					N.m	1.98	2.37	3.29	3.95	4.94	5.93	6.59	7.42	8.91	10.69	11.88	13.42
			220/240	50	kgfcm	19.4	23.3	32.4	38.9	48.6	58.3	64.8	73.0	87.6	105.1	116.8	132.0
					N.m	1.91	2.29	3.18	3.81	4.76	5.72	6.35	7.15	8.58	10.30	11.45	12.94
		90	110	60	kgfcm	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2
					N.m	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53
			220	60	kgfcm	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2
					N.m	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53
			220/240	50	kgfcm	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2
					N.m	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200
9SDG*-120F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	164.3	197.2	219.1	273.9	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	16.11	19.33	21.47	26.84	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220	60	kgfcm	164.3	197.2	219.1	273.9	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	16.11	19.33	21.47	26.84	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220/240	50	kgfcm	158.4	190.1	211.2	264.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	15.52	18.63	20.70	25.87	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
		90	110	60	kgfcm	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	247.8	297.4	300.0
					N.m	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	24.28	29.14	29.40
			220	60	kgfcm	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	247.8	297.4	300.0
					N.m	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	24.28	29.14	29.40
			220/240	50	kgfcm	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	247.8	297.4	300.0
					N.m	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	24.28	29.14	29.40

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SDG*-120F2W	9WD□BL/□BR/□BRL	1200	110	60	kgfcm	68.1	79.7	95.9	110.6	145.3	164.3	153.1	142.9	122.4
					N.m	6.67	7.81	9.39	10.83	14.23	16.11	15.00	14.00	12.00
			220	60	kgfcm	68.1	79.7	95.9	110.6	145.3	164.3	153.1	142.9	122.4
					N.m	6.67	7.81	9.39	10.83	14.23	16.11	15.00	14.00	12.00
			220/240	50	kgfcm	65.6	76.8	92.4	106.6	140.0	158.4	153.1	142.9	122.4
					N.m	6.43	7.53	9.06	10.44	13.72	15.52	15.00	14.00	12.00
		90	110	60	kgfcm	23.0	26.9	32.3	37.3	49.0	55.4	64.5	84.0	122.4
					N.m	2.25	2.63	3.17	3.66	4.80	5.43	6.32	8.23	12.00
			220	60	kgfcm	23.0	26.9	32.3	37.3	49.0	55.4	64.5	84.0	122.4
					N.m	2.25	2.63	3.17	3.66	4.80	5.43	6.32	8.23	12.00
			220/240	50	kgfcm	23.0	26.9	32.3	37.3	49.0	55.4	64.5	84.0	122.4
					N.m	2.25	2.63	3.17	3.66	4.80	5.43	6.32	8.23	12.00

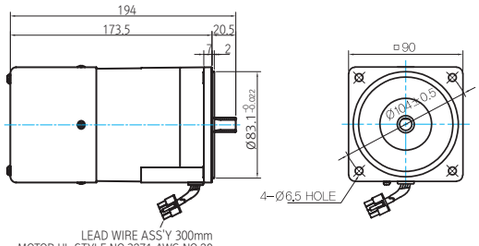
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	5	7.5	10	15	20	25	30	40	50	60	80
9SDG*-120F2WH	9WHD□-030	1200	110	60	kgfcm	28.9	41.8	53.8	75.7	95.6	109.6	127.5	156.7	173.5	163.3	132.7
					N.m	2.83	4.10	5.27	7.42	9.37	10.74	12.49	15.36	17.00	16.00	13.00
			220	60	kgfcm	28.9	41.8	53.8	75.7	95.6	109.6	127.5	156.7	173.5	163.3	132.7
					N.m	2.83	4.10	5.27	7.42	9.37	10.74	12.49	15.36	17.00	16.00	13.00
			220/240	50	kgfcm	29.9	43.3	55.7	78.4	99.1	113.5	132.1	162.4	173.5	163.3	132.7
					N.m	2.93	4.25	5.46	7.69	9.71	11.12	12.95	15.91	17.00	16.00	13.00
		90	110	60	kgfcm	9.7	14.1	18.1	25.5	32.3	37.0	43.0	52.9	60.5	67.2	78.8
					N.m	0.95	1.38	1.78	2.50	3.16	3.62	4.21	5.18	5.93	6.59	7.73
			220	60	kgfcm	9.7	14.1	18.1	25.5	32.3	37.0	43.0	52.9	60.5	67.2	78.8
					N.m	0.95	1.38	1.78	2.50	3.16	3.62	4.21	5.18	5.93	6.59	7.73
			220/240	50	kgfcm	10.1	14.6	18.8	26.4	33.4	38.3	44.5	54.8	62.6	69.6	81.7
					N.m	0.99	1.43	1.84	2.59	3.27	3.75	4.37	5.37	6.14	6.82	8.00

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	15	20	25	30	40	50	60	80	100	120	160	200	225	240
9SDG*-120F2HC	9HC□-◇	1200	110	60	kgfcm	90.9	121	151	182	242	303	364	485	606	727	969	1212	1363	1454
					N.m	8.91	11.9	14.8	17.8	23.7	29.7	35.7	47.5	59.4	71.2	95	119	134	142
			220	60	kgfcm	90.9	121	151	182	242	303	364	485	606	727	969	1212	1363	1454
					N.m	8.91	11.9	14.8	17.8	23.7	29.7	35.7	47.5	59.4	71.2	95	119	134	142
			220/240	50	kgfcm	87.6	117	146	175	234	292	350	467	584	701	934	1168	1314	1402
					N.m	8.58	11.5	14.3	17.2	22.9	28.6	34.3	45.8	57.2	68.7	91.5	115	129	137
		90	110	60	kgfcm	30.7	40.9	51.1	61.3	81.8	102	123	164	204	245	327	409	460	491
					N.m	3.01	4.01	5.01	6.01	8.02	10	12.1	16.1	20	24	32	40.1	45.1	48.1
			220	60	kgfcm	30.7	40.9	51.1	61.3	81.8	102	123	164	204	245	327	409	460	491
					N.m	3.01	4.01	5.01	6.01	8.02	10	12.1	16.1	20	24	32	40.1	45.1	48.1
			220/240	50	kgfcm	30.7	40.9	51.1	61.3	81.8	102	123	164	204	245	327	409	460	491
					N.m	3.01	4.01	5.01	6.01	8.02	10	12.1	16.1	20	24	32	40.1	45.1	48.1

Dimensions

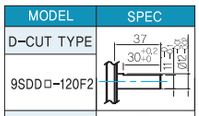
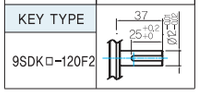
MOTOR ONLY

● MOTOR MODEL:
9SD□□–120F2 (POWERFUL FAN)

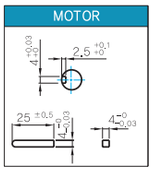


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO. 1007 AWG NO.22

● MOTOR OUTPUT SHAFT

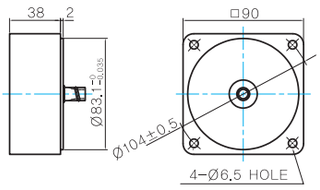
MODEL	SPEC
D-CUT TYPE	
9SDD□–120F2	
KEY TYPE	
9SDK□–120F2	

● KEY SPEC



INTER-DECIMAL GEARBOX

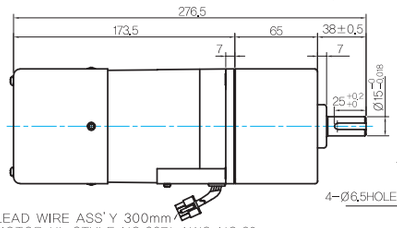
● MODEL: 9XD10□□



GEARED MOTOR

P TYPE GEARBOX

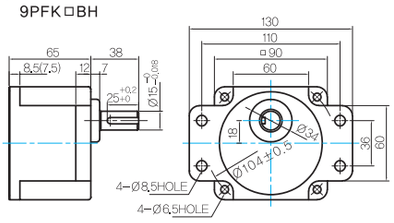
● MOTOR MODEL:
9SDG□–120F2P (POWERFUL FAN)



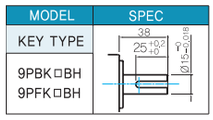
LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9PBK□BH

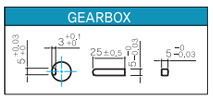
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

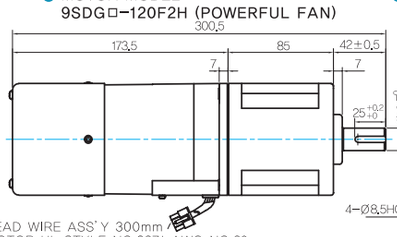
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC



H TYPE GEARBOX

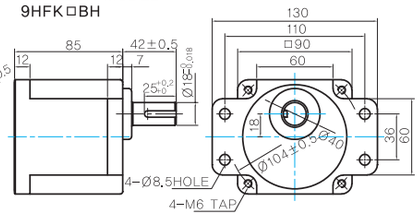
● MOTOR MODEL:
9SDG□–120F2H (POWERFUL FAN)



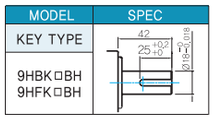
LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9HBK□BH

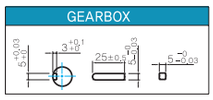
● GEARBOX MODEL:
9HFK□BH



● GEARBOX OUTPUT SHAFT

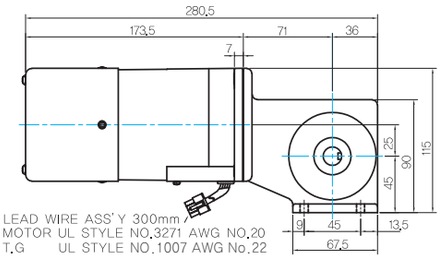
MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC



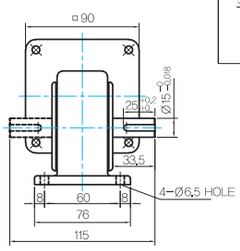
W TYPE GEARBOX

● MOTOR MODEL:
9SDG□–120F2W (POWERFUL FAN)

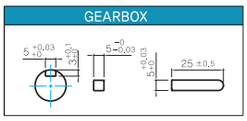


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9WD□BL/BR/BRL



● KEY SPEC

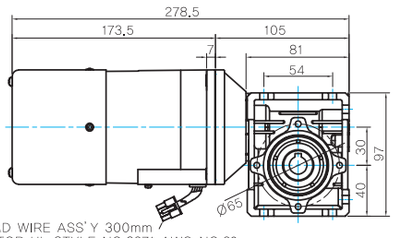


B AC Motors

S.C. Induction Motor 120W (□90mm)

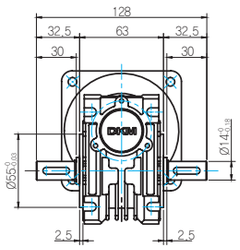
WH TYPE GEARBOX

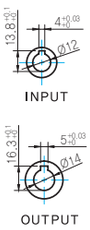
● MOTOR MODEL:
9SDG□-120F2WH (POWERFUL FAN)



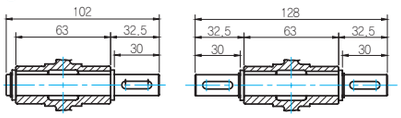
LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9WHD□-030



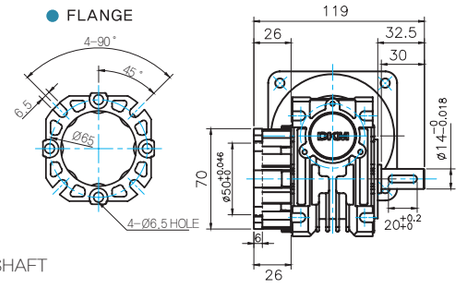


● SHAFT

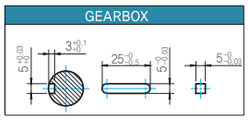


Unidirectional Bi-directional

● FLANGE

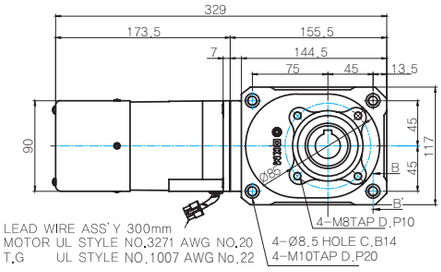


● KEY SPEC



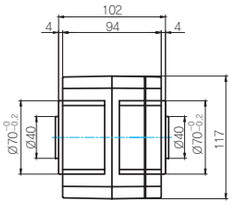
HC TYPE GEARBOX

● MOTOR MODEL :
9SDG□-120F2HC-□ (POWERFUL FAN)

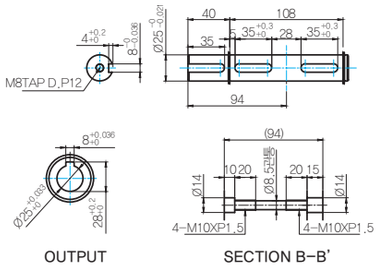


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

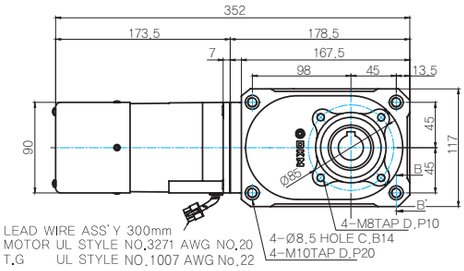
● GEARBOX MODEL :
9HC(15 ~ 60)□



● SHAFT

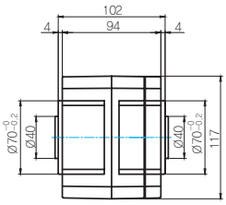


● MOTOR MODEL :
9SDG□-120F2HC-□ (POWERFUL FAN)

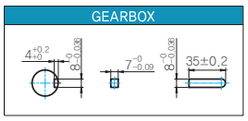


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL :
9HC(80 ~ 240)□



● KEY SPEC



WEIGHT

PART		WEIGHT(kg)
MOTOR		3.50
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WD□BL/BR/BRL	1.00
	9WHD□-030	1.20
	9HC15-◇	4.05
	9HC20-◇ - 9HC60-◇	4.10
	9HC80-◇ - 9HC240-◇	4.75
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9SDD□-120F2	9SDG□-120F2P+9PBK□BH	9SDG□-120F2P+9PFK□BH	9SDG□-120F2H+9HBK□BH
9SDG□-120F2H+9HFK□BH	**9SDG□-120F2W+9WD□BL**	**9SDG□-120F2WH+9WHD□-030**	**9SDG□-120F2HC+9HC□-◇**

180W

Speed Control
Induction Motor
180W(□ 90mm)

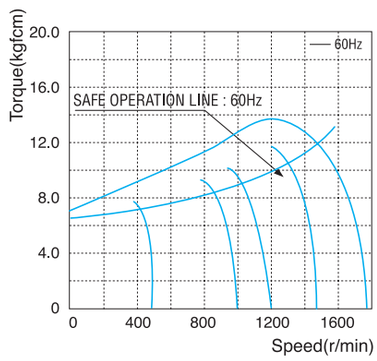
Motor Specification

Model 9SDG*-180F2□-C(L): Gear Type Shaft 9SDD*-180F2-C(L): D-Cut Type Shaft 9SDK*-180F2-C(L): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9SD◇1(A)-180F2□-C	9SD◇1(A)-180F2□-L	180	1ø 110	60	4	Cont.	90-1700	6.40	0.640	10.00	1.000	3.00	0.300	30.0 / 250
9SD◇2(D)-180F2□-C	9SD◇2(D)-180F2□-L	180	1ø 220	60	4	Cont.	90-1700	6.40	0.640	10.00	1.000	3.00	0.300	8.0 / 400
9SD◇E-180F2□-C	9SD◇E-180F2□-L	180	1ø 220	50	4	Cont.	90-1400	6.40	0.640	10.00	1.000	3.00	0.300	8.0 / 400
			1ø 240				90-1700	7.00	0.700	11.00	1.100	3.30	0.330	

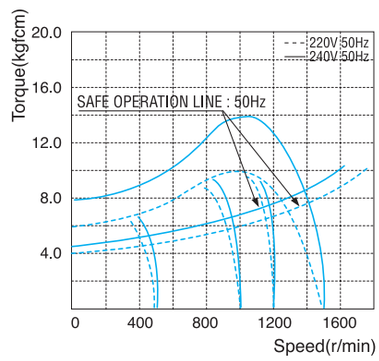
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, D, E contain a built-in thermal protector.

Speed-Torque Characteristics

9SDG2(D)-180F2□



9SDGE-180F2□



Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gear box Model	r/min	V	Hz	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	200
9SDG*-180F2H	9HBK□BH	1200	110	60	kgfcm	24.3	29.2	40.5	48.6	60.8	72.9	81.0	91.3	109.5	131.4	146.0	165.0	198.0	237.6	264.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	2.38	2.86	3.97	4.76	5.95	7.14	7.94	8.94	10.73	12.88	14.31	16.17	19.40	23.28	25.87	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220	60	kgfcm	24.3	29.2	40.5	48.6	60.8	72.9	81.0	91.3	109.5	131.4	146.0	165.0	198.0	237.6	264.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	2.38	2.86	3.97	4.76	5.95	7.14	7.94	8.94	10.73	12.88	14.31	16.17	19.40	23.28	25.87	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220/240	50	kgfcm	24.3	29.2	40.5	48.6	60.8	72.9	81.0	91.3	109.5	131.4	146.0	165.0	198.0	237.6	264.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	2.38	2.86	3.97	4.76	5.95	7.14	7.94	8.94	10.73	12.88	14.31	16.17	19.40	23.28	25.87	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
	9HFK□BH	90	110	60	kgfcm	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	212.4	265.5	300.0	300.0
					N.m	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	20.82	26.02	29.40	29.40
			220	60	kgfcm	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	212.4	265.5	300.0	300.0
					N.m	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	20.82	26.02	29.40	29.40
			220/240	50	kgfcm	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	212.4	265.5	300.0	300.0
					N.m	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	20.82	26.02	29.40	29.40

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
; a white background indicates the rotation in the opposite direction.

B AC Motors

S.C. Induction Motor 180W (□ 90mm)

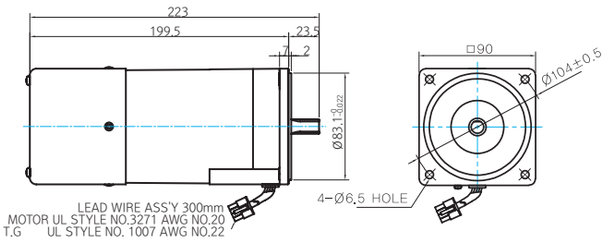
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	5	7.5	10	15	20	25	30	40	50	60	80	100
9SDG*-180F2WH	9WHD□-030	1200	110	60	kgfcm	34.8	50.4	64.8	91.2	115.2	132.0	153.6	183.7	173.5	163.3	132.7	–
					N.m	3.41	4.94	6.35	8.94	11.29	12.94	15.05	18.00	17.00	16.00	13.00	–
			220	60	kgfcm	34.8	50.4	64.8	91.2	115.2	132.0	153.6	183.7	173.5	163.3	132.7	–
					N.m	3.41	4.94	6.35	8.94	11.29	12.94	15.05	18.00	17.00	16.00	13.00	–
			220/240	50	kgfcm	34.8	50.4	64.8	91.2	115.2	132.0	153.6	183.7	173.5	163.3	132.7	–
					N.m	3.41	4.94	6.35	8.94	11.29	12.94	15.05	18.00	17.00	16.00	13.00	–
		90	110	60	kgfcm	10.4	15.7	20.2	29.2	36.5	43.2	47.5	61.4	70.8	77.8	96.0	–
					N.m	1.02	1.53	1.98	2.86	3.58	4.23	4.66	6.02	6.94	7.62	9.41	–
			220	60	kgfcm	10.4	15.7	20.2	29.2	36.5	43.2	47.5	61.4	70.8	77.8	96.0	–
					N.m	1.02	1.53	1.98	2.86	3.58	4.23	4.66	6.02	6.94	7.62	9.41	–
			220/240	50	kgfcm	10.4	17.2	22.2	32.1	40.1	47.5	52.3	67.6	77.9	85.5	105.6	–
					N.m	1.02	1.69	2.17	3.14	3.93	4.66	5.12	6.62	7.63	8.38	10.35	–
9SDG*-180F2WH	9WHD□-040	1200	110	60	kgfcm	–	–	–	–	–	–	–	–	244.0	273.6	295.0	270.0
					N.m	–	–	–	–	–	–	–	–	23.91	26.81	28.91	26.46
			220	60	kgfcm	–	–	–	–	–	–	–	–	244.0	273.6	295.0	270.0
					N.m	–	–	–	–	–	–	–	–	23.91	26.81	28.91	26.46
			220/240	50	kgfcm	–	–	–	–	–	–	–	–	244.0	273.6	295.0	270.0
					N.m	–	–	–	–	–	–	–	–	23.91	26.81	28.91	26.46
		90	110	60	kgfcm	–	–	–	–	–	–	–	–	73.2	82.1	97.9	112.8
					N.m	–	–	–	–	–	–	–	–	7.17	8.04	9.60	11.05
			220	60	kgfcm	–	–	–	–	–	–	–	–	73.2	82.1	97.9	112.8
					N.m	–	–	–	–	–	–	–	–	7.17	8.04	9.60	11.05
			220/240	50	kgfcm	–	–	–	–	–	–	–	–	73.2	82.1	97.9	112.8
					N.m	–	–	–	–	–	–	–	–	7.17	8.04	9.60	11.05

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	15	20	25	30	40	50	60	80	100	120	160	200	225	240
9SDG*-180F2HC	9HC□-◇	1200	110	60	kgfcm	110	146	183	219	292	365	438	584	730	876	1168	1460	1643	1752
					N.m	10.8	14.3	17.9	21.5	28.6	35.8	42.9	57.2	71.5	85.8	115	143	161	172
			220	60	kgfcm	110	146	183	219	292	365	438	584	730	876	1168	1460	1643	1752
					N.m	10.8	14.3	17.9	21.5	28.6	35.8	42.9	57.2	71.5	85.8	115	143	161	172
			220/240	50	kgfcm	110	146	183	219	292	365	438	584	730	876	1168	1460	1643	1752
					N.m	10.8	14.3	17.9	21.5	28.6	35.8	42.9	57.2	71.5	85.8	115	143	161	172
		90	110	60	kgfcm	32.9	43.8	54.8	65.7	87.6	110	131	175	219	263	350	438	493	526
					N.m	3.22	4.29	5.37	6.44	8.58	10.8	12.8	17.2	21.5	25.8	34.3	42.9	48.3	51.5
			220	60	kgfcm	32.9	43.8	54.8	65.7	87.6	110	131	175	219	263	350	438	493	526
					N.m	3.22	4.29	5.37	6.44	8.58	10.8	12.8	17.2	21.5	25.8	34.3	42.9	48.3	51.5
			220/240	50	kgfcm	32.9	43.8	54.8	65.7	87.6	110	131	175	219	263	350	438	493	526
					N.m	3.22	4.29	5.37	6.44	8.58	10.8	12.8	17.2	21.5	25.8	34.3	42.9	48.3	51.5

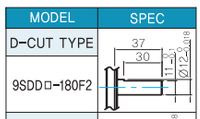
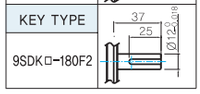
Dimensions

MOTOR ONLY

● MOTOR MODEL:
9SD□□-180F2 (POWERFUL FAN)

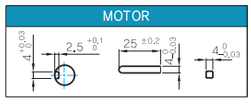


● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
9SDD□-180F2	
KEY TYPE	
9SDK□-180F2	

● KEY SPEC

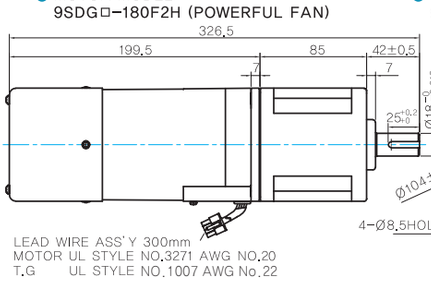
MOTOR



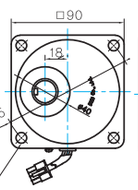
GEARED MOTOR

H TYPE GEARBOX

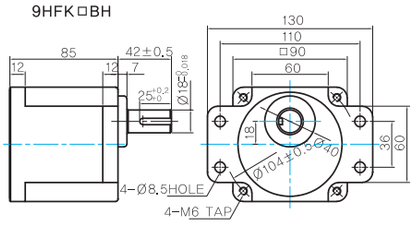
● MOTOR MODEL:
9SDG□-180F2H (POWERFUL FAN)



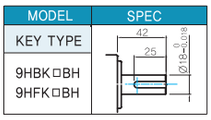
● GEARBOX MODEL:
9HBK□BH



● GEARBOX MODEL:
9HFK□BH

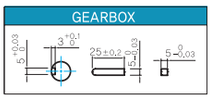


● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

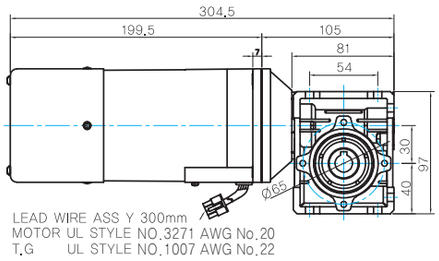
● KEY SPEC

GEARBOX

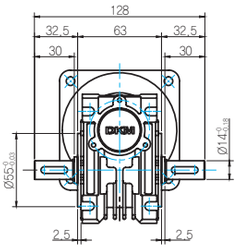


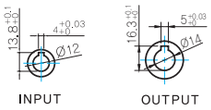
WH TYPE GEARBOX

● MOTOR MODEL:
9SDG□-180F2WH (POWERFUL FAN)

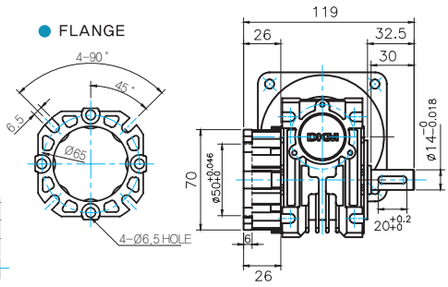


● GEARBOX MODEL:
9WHD□-030

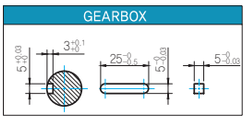




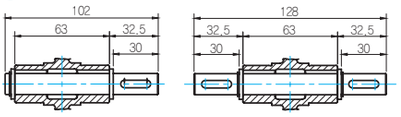
● FLANGE



● KEY SPEC

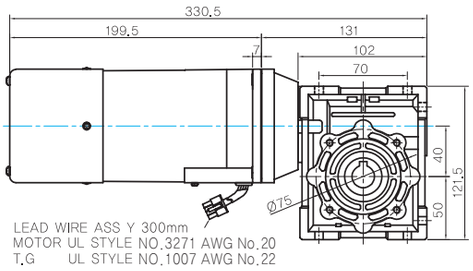


● SHAFT

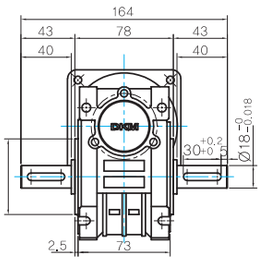


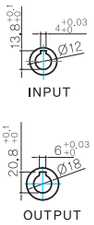
Unidirectional Bi-directional

● MOTOR MODEL:
9SDG□-180F2WH (GENERAL FAN)

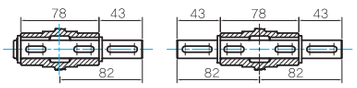


● GEARBOX MODEL:
9WHD□-040



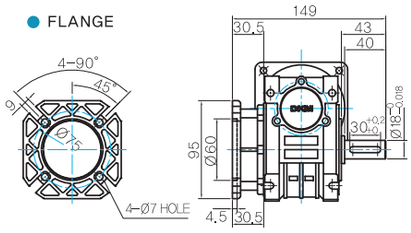


● SHAFT

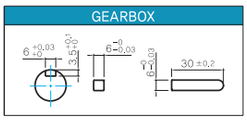


Unidirectional Bi-directional

● FLANGE



● KEY SPEC



WEIGHT

PART		WEIGHT(kg)
MOTOR		4.25
GEAR BOX	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WHD□-030	1.20
	9WHD□-040	2.10
	9HC15-◇	4.05
	9HC20-◇ - 9HC60-◇	4.10
	9HC80-◇ - 9HC240-◇	4.75
	9XD10○○	0.60

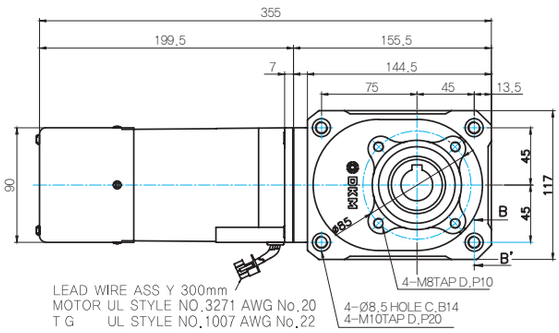
*The output flange and shaft are sold separately.

B AC Motors

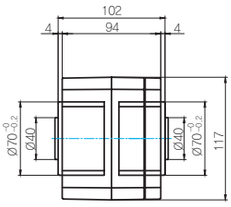
S.C. Induction Motor 180W (□ 90mm)

HC TYPE GEARBOX

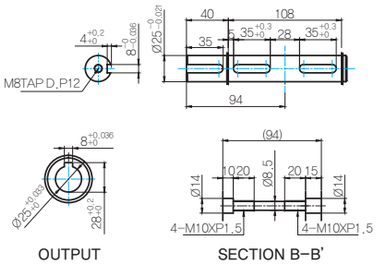
● MOTOR MODEL :
9SDG□-180F2HC-□ (POWERFUL FAN)



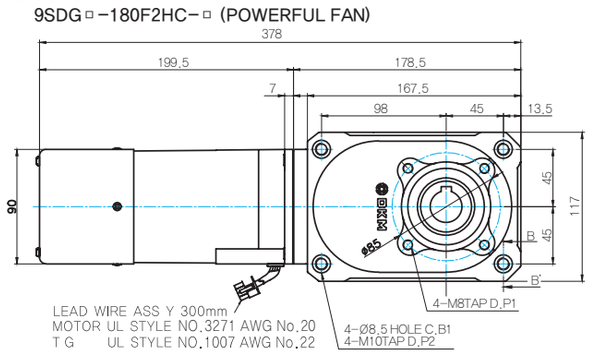
● GEARBOX MODEL:
9HC(15 ~ 60)□



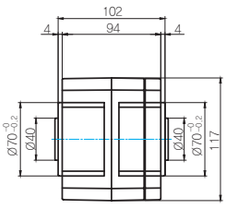
● SHAFT



● MOTOR MODEL :
9SDG□-180F2HC-□ (POWERFUL FAN)

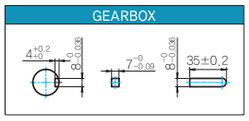


● GEARBOX MODEL :
9HC(80 ~ 240)□



● KEY SPEC

GEARBOX



WEIGHT

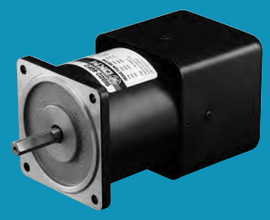
PART		WEIGHT(kg)
MOTOR		4.25
GEAR BOX	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WHD□-030	1.20
	9WHD□-040	2.10
	9HC15-◇	4.05
	9HC20-◇ - 9HC60-◇	4.10
	9HC80-◇ - 9HC240-◇	4.75
	9XD10○○	0.60

* The output flange and shaft are sold separately

Motor Images

9SDD□-180F2	9SDG□-180F2H+9HBK□BH	9SDG□-180F2H+9HFK□BH	9SDG□-180F2WH+9WHD□	9SDG□-180F2HC+9HC□□

Speed Control Reversible Motor



Index

Speed Control Reversible Motor 6W (□60mm)	B-259
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Speed Control Reversible Motor 120W (□90mm)	B-284

B AC Motors

S.C. Reversible Motor 6W (□60mm)

6W Speed Control Reversible Motor 6W(□60mm)

Motor Specification

Model 6SRDG*-6G-C(L): Gear Type Shaft 6SRDD*-6-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
6SRD◇1(A)-6□-C	6SRD◇1(A)-6□-L	6	1ø110	60	4	30min.	90-1700	0.36	0.036	0.54	0.054	0.36	0.036	3.0 / 250
6SRD◇B-6□-C	6SRD◇B-6□-L	6	1ø100	50	4	30min.	90-1400	0.40	0.040	0.55	0.055	0.37	0.037	3.5 / 250
				60			90-1700	0.38	0.038	0.55	0.055	0.37	0.037	
6SRD◇C-6□-C	6SRD◇C-6□-L	6	1ø200	50	4	30min.	90-1400	0.40	0.040	0.55	0.055	0.37	0.037	1.0 / 450
				60			90-1700	0.38	0.038	0.55	0.055	0.37	0.037	
6SRD◇2(D)-6□-C	6SRD◇2(D)-6□-L	6	1ø220	60	4	30min.	90-1700	0.40	0.040	0.56	0.056	0.39	0.039	1.0 / 450
6SRD◇E-6□-C	6SRD◇E-6□-L	6	1ø220	50	4	30min.	90-1400	0.32	0.032	0.47	0.047	0.31	0.031	1.0 / 450
			1ø240					0.36	0.036	0.52	0.052	0.33	0.033	

1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only. 3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached. 4) Impedance Protected Type

Max. Permissible Torque at Output Shaft of Gearbox

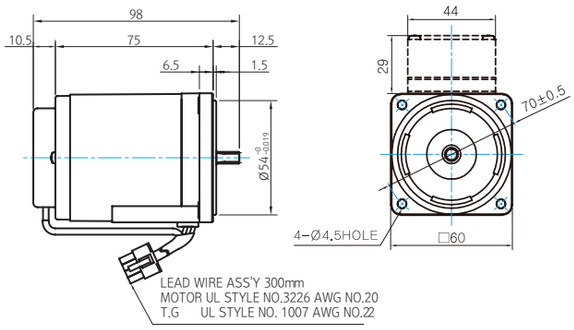
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
6SRDG*-6G	6GBD□MH	1200	110	60	kgfcm	1.3	1.6	2.2	2.6	3.3	3.9	4.4	5.5	6.6	7.9	7.9	9.9	11.8	14.2	15.8	17.8	21.4	26.7	30.0	30.0	30.0	30.0	30.0	30.0	30.0
					N.m	0.13	0.15	0.21	0.26	0.32	0.39	0.43	0.54	0.64	0.77	0.77	0.97	1.16	1.39	1.55	1.75	2.10	2.62	2.94	2.94	2.94	2.94	2.94	2.94	2.94
			220	60	kgfcm	1.4	1.6	2.3	2.7	3.4	4.1	4.5	5.7	6.8	8.2	8.2	10.2	12.3	14.7	16.4	18.5	22.2	27.7	30.0	30.0	30.0	30.0	30.0	30.0	92.4
					N.m	0.13	0.16	0.22	0.27	0.33	0.40	0.44	0.56	0.67	0.80	0.80	1.00	1.20	1.44	1.60	1.81	2.17	2.72	2.94	2.94	2.94	2.94	2.94	2.94	9.06
			220/240	50	kgfcm	1.1	1.4	1.9	2.3	2.9	3.4	3.8	4.8	5.7	6.9	6.9	8.6	10.3	12.4	13.7	15.5	18.6	23.3	27.9	30.0	30.0	30.0	30.0	30.0	30.0
					N.m	0.11	0.13	0.19	0.22	0.28	0.34	0.37	0.47	0.56	0.67	0.67	0.84	1.01	1.21	1.34	1.52	1.82	2.28	2.74	2.94	2.94	2.94	2.94	2.94	2.94
		90	110	60	kgfcm	0.9	1.0	1.5	1.7	2.2	2.6	2.9	3.6	4.4	5.2	5.3	6.6	7.9	9.5	10.5	11.9	14.3	17.8	21.4	23.8	28.5	30.0	30.0	30.0	30.0
					N.m	0.09	0.10	0.14	0.17	0.21	0.26	0.29	0.36	0.43	0.51	0.52	0.64	0.77	0.93	1.03	1.16	1.40	1.75	2.10	2.33	2.79	2.94	2.94	2.94	2.94
			220	60	kgfcm	0.9	1.1	1.6	1.9	2.4	2.8	3.2	3.9	4.7	5.7	5.7	7.1	8.5	10.2	11.4	12.9	15.4	19.3	23.2	25.7	30.0	30.0	30.0	30.0	30.0
					N.m	0.09	0.11	0.15	0.19	0.23	0.28	0.31	0.39	0.46	0.56	0.56	0.70	0.84	1.00	1.12	1.26	1.51	1.89	2.27	2.52	2.94	2.94	2.94	2.94	2.94
			220/240	50	kgfcm	0.8	0.9	1.3	1.5	1.9	2.3	2.5	3.1	3.8	4.5	4.5	5.7	6.8	8.1	9.1	10.2	12.3	15.3	18.4	20.5	24.6	30.0	30.0	30.0	30.0
					N.m	0.07	0.09	0.12	0.15	0.18	0.22	0.25	0.31	0.37	0.44	0.44	0.55	0.67	0.80	0.89	1.00	1.20	1.50	1.80	2.01	2.41	2.94	2.94	2.94	2.94

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

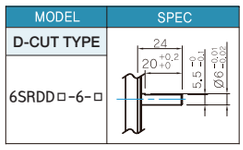
Dimensions

MOTOR ONLY

● MOTOR MODEL: 6SRD□□-6 (NO FAN)



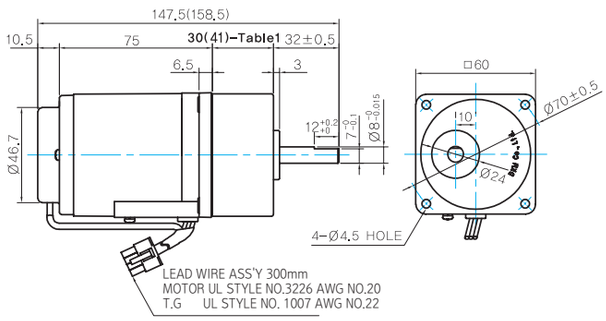
● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
6SRDD□-6-□	

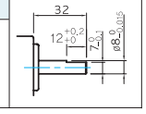
GEARED MOTOR

G TYPE GEARBOX

- MOTOR MODEL: 6SRDG□-6G (NO FAN)
- GEARBOX MODEL: 6GBD□MH



- GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
6GBD□MH	

WEIGHT

PART		WEIGHT(kg)
MOTOR		0.75
GEAR BOX	6GBD3MH - 6GBD18MH	0.30
	6GBD20MH - 6GBD40MH	0.32
	6GBD50MH - 6GBD250MH	0.34

*The output flange and shaft are sold separately.

- 30(41)-Table1

SIZE(mm)	GEAR RATIO
30	6GBD3MH – 6GBD18MH
41	6GBD20MH – 6GBD250MH

Motor Images

6SRDD□-6	6SRDG□-6G + 6GBD□MH

B AC Motors

S.C. Reversible Motor 6W (□70mm)

6W Speed Control Reversible Motor 6W(□70mm)

Motor Specification

Model 7SRDG*-6G-C(L): Gear Type Shaft 7SRDD*-6-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
7SRD◇1(A)-6□-C	7SRD◇1(A)-6□-L	6	1ø110	60	4	30min.	90-1700	0.37	0.037	0.54	0.054	0.36	0.036	3.0 / 250
7SRD◇B-6□-C	7SRD◇B-6□-L	6	1ø100	50	4	30min.	90-1400	0.40	0.040	0.55	0.055	0.37	0.037	3.5 / 250
				60			90-1700	0.40	0.040	0.55	0.055	0.38	0.038	
7SRD◇C-6□-C	7SRD◇C-6□-L	6	1ø200	50	4	30min.	90-1400	0.40	0.040	0.55	0.055	0.37	0.037	1.0 / 450
				60			90-1700	0.40	0.040	0.55	0.055	0.38	0.038	
7SRD◇2(D)-6□-C	7SRD◇2(D)-6□-L	6	1ø220	60	4	30min.	90-1700	0.41	0.041	0.56	0.056	0.39	0.039	1.0 / 450
7SRD◇E-6□-C	7SRD◇E-6□-L	6	1ø220	50	4	30min.	90-1400	0.32	0.032	0.47	0.047	0.31	0.031	1.0 / 450
			1ø240					0.36	0.036	0.52	0.052	0.33	0.033	

1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only. 3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached. 4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

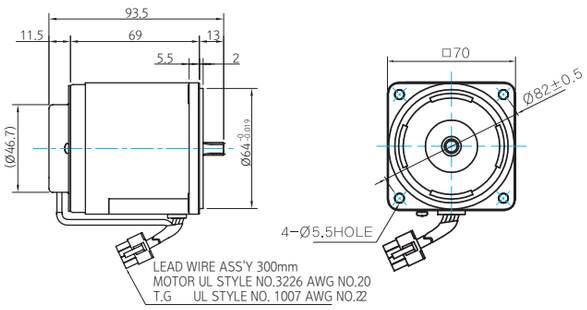
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
7SRDG*-6G	7GBK□BMH	1200	110	60	kgfcm	1.3	1.6	2.2	2.6	3.3	3.9	4.4	5.5	6.6	7.9	7.9	9.9	11.8	14.2	15.8	17.8	21.4	26.7	32.1	35.6	42.8	50.0	50.0	50.0
					N.m	0.13	0.15	0.21	0.26	0.32	0.39	0.43	0.54	0.64	0.77	0.77	0.97	1.16	1.39	1.55	1.75	2.10	2.62	3.14	3.49	4.19	4.90	4.90	4.90
			220	60	kgfcm	1.4	1.6	2.3	2.7	3.4	4.1	4.5	5.7	6.8	8.2	8.2	10.2	12.3	14.7	16.4	18.5	22.2	27.7	33.3	37.0	44.4	50.0	50.0	50.0
					N.m	0.13	0.16	0.22	0.27	0.33	0.40	0.44	0.56	0.67	0.80	0.80	1.00	1.20	1.44	1.60	1.81	2.17	2.72	3.26	3.62	4.35	4.90	4.90	4.90
			220/240	50	kgfcm	1.1	1.4	1.9	2.3	2.9	3.4	3.8	4.8	5.7	6.9	6.9	8.6	10.3	12.4	13.7	15.5	18.6	23.3	27.9	31.0	37.2	46.5	50.0	50.0
					N.m	0.11	0.13	0.19	0.22	0.28	0.34	0.37	0.47	0.56	0.67	0.67	0.84	1.01	1.21	1.34	1.52	1.82	2.28	2.74	3.04	3.65	4.56	4.90	4.90
		90	110	60	kgfcm	0.9	1.0	1.5	1.7	2.2	2.6	2.9	3.6	4.4	5.2	5.3	6.6	7.9	9.5	10.5	11.9	14.3	17.8	21.4	23.8	28.5	35.6	42.8	47.5
					N.m	0.09	0.10	0.14	0.17	0.21	0.26	0.29	0.36	0.43	0.51	0.52	0.64	0.77	0.93	1.03	1.16	1.40	1.75	2.10	2.33	2.79	3.49	4.19	4.66
			220	60	kgfcm	0.9	1.1	1.6	1.9	2.4	2.8	3.2	3.9	4.7	5.7	5.7	7.1	8.5	10.2	11.4	12.9	15.4	19.3	23.2	25.7	30.9	38.6	46.3	50.0
					N.m	0.09	0.11	0.15	0.19	0.23	0.28	0.31	0.39	0.46	0.56	0.56	0.70	0.84	1.00	1.12	1.26	1.51	1.89	2.27	2.52	3.03	3.78	4.54	4.90
			220/240	50	kgfcm	0.8	0.9	1.3	1.5	1.9	2.3	2.5	3.1	3.8	4.5	4.5	5.7	6.8	8.1	9.1	10.2	12.3	15.3	18.4	20.5	24.6	30.7	36.8	40.9
					N.m	0.07	0.09	0.12	0.15	0.18	0.22	0.25	0.31	0.37	0.44	0.44	0.55	0.67	0.80	0.89	1.00	1.20	1.50	1.80	2.01	2.41	3.01	3.61	4.01

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

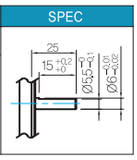
Dimensions

MOTOR ONLY

● MOTOR MODEL: 7SRD□□-6 (NO FAN)



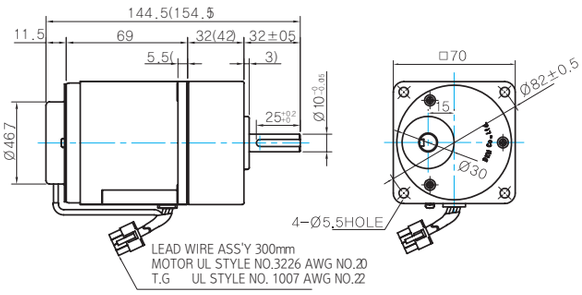
● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
7SRDD□-6-□	

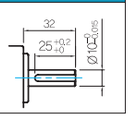
GEARED MOTOR

G TYPE GEARBOX

- MOTOR MODEL: 7SRDG□-6G (NO FAN)
- GEARBOX MODEL: 7GBK□BMH

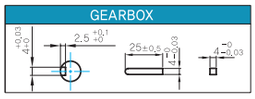


- GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
7GBK□BMH	

- KEY SPEC

GEARBOX



WEIGHT

PART		WEIGHT(kg)
MOTOR		0.93
GEAR BOX	7GBK3BMH - 7GBK18BMH	0.38
	7GBK20BMH - 7GBK40BMH	0.48
	7GBK50BMH - 7GBK200BMH	0.53

*The output flange and shaft are sold separately.

- 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH - 7GBK18BMH
42	7GBK20BMH - 7GBK200BMH

Motor Images

7SRDD□-6	7SRDG□-6G+7GBK□BMH

S.C. Reversible Motor 10W (□70mm)

10W Speed Control Reversible Motor 10W(□70mm)

Motor Specification

Model (7SRDG*-10G-C(L): Gear Type Shaft, 7SRDD*-10-C(L): D-Cut Type Shaft)		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque 1200r/min		Permissible Torque 90r/min		Capacitor
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
7SRD◇1(A)-10□-C	7SRD◇1(A)-10□-L	10	1ø110	60	4	30min.	90-1700	0.60	0.060	0.75	0.075	0.42	0.042	3.5 / 250
7SRD◇B-10□-C	7SRD◇B-10□-L	10	1ø100	50	4	30min.	90-1400	0.60	0.060	0.75	0.075	0.42	0.042	5.0 / 250
				60			90-1700	0.60	0.060	0.75	0.075	0.42	0.042	
7SRD◇C-10□-C	7SRD◇C-10□-L	10	1ø200	50	4	30min.	90-1400	0.58	0.058	0.74	0.074	0.41	0.041	1.2 / 450
				60			90-1700	0.58	0.058	0.73	0.073	0.41	0.041	
7SRD◇2(D)-10□-C	7SRD◇2(D)-10□-L	10	1ø220	60	4	30min.	90-1700	0.60	0.060	0.75	0.075	0.42	0.042	1.2 / 450
7SRD◇E-10□-C	7SRD◇E-10□-L	10	1ø220	50	4	30min.	90-1400	0.58	0.058	0.74	0.074	0.41	0.041	1.2 / 450
			1ø240					0.62	0.062	0.76	0.076	0.42	0.042	

1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only. 3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

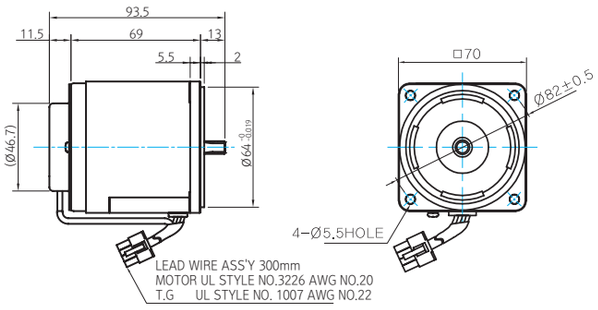
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
7SRDG*-10G	7GBK□BMH	1200	110	60	kgfcm	1.8	2.2	3.0	3.6	4.6	5.5	6.1	7.6	9.1	10.9	11.0	13.7	16.4	19.7	21.9	24.8	29.7	37.1	44.6	49.5	50.0	50.0	50.0	50.0
					N.m	0.18	0.21	0.30	0.36	0.45	0.54	0.60	0.74	0.89	1.07	1.07	1.34	1.61	1.93	2.15	2.43	2.91	3.64	4.37	4.85	4.90	4.90	4.90	4.90
			220	60	kgfcm	1.8	2.2	3.0	3.6	4.6	5.5	6.1	7.6	9.1	10.9	11.0	13.7	16.4	19.7	21.9	24.8	29.7	37.1	44.6	49.5	50.0	50.0	50.0	50.0
					N.m	0.18	0.21	0.30	0.36	0.45	0.54	0.60	0.74	0.89	1.07	1.07	1.34	1.61	1.93	2.15	2.43	2.91	3.64	4.37	4.85	4.90	4.90	4.90	4.90
			220/240	50	kgfcm	1.8	2.2	3.0	3.6	4.5	5.4	6.0	7.5	9.0	10.8	10.8	13.5	16.2	19.4	21.6	24.4	29.3	36.6	44.0	48.8	50.0	50.0	50.0	50.0
					N.m	0.18	0.21	0.29	0.35	0.44	0.53	0.59	0.73	0.88	1.06	1.06	1.32	1.59	1.91	2.12	2.39	2.87	3.59	4.31	4.79	4.90	4.90	4.90	4.90
		90	110	60	kgfcm	1.0	1.2	1.7	2.0	2.6	3.1	3.4	4.3	5.1	6.1	6.1	7.7	9.2	11.0	12.3	13.9	16.6	20.8	24.9	27.7	33.3	41.6	49.9	50.0
					N.m	0.10	0.12	0.17	0.20	0.25	0.30	0.33	0.42	0.50	0.60	0.60	0.75	0.90	1.08	1.20	1.36	1.63	2.04	2.44	2.72	3.26	4.07	4.89	4.90
			220	60	kgfcm	1.0	1.2	1.7	2.0	2.6	3.1	3.4	4.3	5.1	6.1	6.1	7.7	9.2	11.0	12.3	13.9	16.6	20.8	24.9	27.7	33.3	41.6	49.9	50.0
					N.m	0.10	0.12	0.17	0.20	0.25	0.30	0.33	0.42	0.50	0.60	0.60	0.75	0.90	1.08	1.20	1.36	1.63	2.04	2.44	2.72	3.26	4.07	4.89	50.00
			220/240	50	kgfcm	1.0	1.2	1.7	2.0	2.5	3.0	3.3	4.2	5.0	6.0	6.0	7.5	9.0	10.8	12.0	13.5	16.2	20.3	24.4	27.1	32.5	40.6	48.7	50.0
					N.m	0.10	0.12	0.16	0.20	0.24	0.29	0.33	0.41	0.49	0.59	0.59	0.73	0.88	1.06	1.17	1.33	1.59	1.99	2.39	2.65	3.18	3.98	4.77	4.90

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

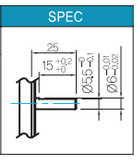
Dimensions

MOTOR ONLY

● MOTOR MODEL: 7SRD□□-10 (NO FAN)



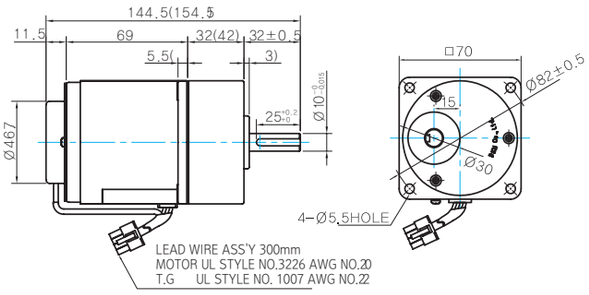
● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
7SRDD□-10-□	

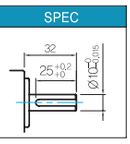
GEARED MOTOR

G TYPE GEARBOX

- MOTOR MODEL:
  7SRDG□−10G (NO FAN)
- GEARBOX MODEL:
  7GBK□BMH

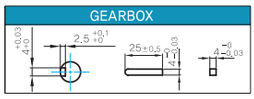


- GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
7GBK□BMH	

- KEY SPEC

GEARBOX



WEIGHT

PART		WEIGHT(kg)
MOTOR		0.93
GEAR BOX	7GBK3BMH - 7GBK18BMH	0.38
	7GBK20BMH - 7GBK40BMH	0.48
	7GBK50BMH - 7GBK200BMH	0.53

*The output flange and shaft are sold separately.

- 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH − 7GBK18BMH
42	7GBK20BMH − 7GBK200BMH

Motor Images

7SRDD□−10	7SRDG□−10G+7GBK□BMH

15W Speed Control Reversible Motor 15W(□ 70mm)

Motor Specification

Model 7SRDG*-15G-C(L): Gear Type Shaft 7SRDD*-15-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
7SRD◇1(A)-15□-C	7SRD◇1(A)-15□-L	15	1ø110	60	4	30min.	90-1700	1.00	0.100	1.35	0.135	0.55	0.055	6.0 / 250
7SRD◇B-15□-C	7SRD◇B-15□-L	15	1ø100	50	4	30min.	90-1400	0.90	0.090	1.10	0.110	0.54	0.054	6.0 / 250
				60			90-1700	0.90	0.090	1.25	0.125	0.54	0.054	
7SRD◇C-15□-C	7SRD◇C-15□-L	15	1ø200	50	4	30min.	90-1400	0.90	0.090	1.10	0.110	0.54	0.054	1.5 / 450
				60			90-1700	0.90	0.090	1.25	0.125	0.54	0.054	
7SRD◇2(D)-15□-C	7SRD◇2(D)-15□-L	15	1ø220	60	4	30min.	90-1700	1.00	0.100	1.35	0.135	0.55	0.055	1.5 / 450
7SRD◇E-15□-C	7SRD◇E-15□-L	15	1ø220	50	4	30min.	90-1400	0.80	0.080	1.00	0.100	0.53	0.053	1.5 / 450
			1ø240					1.00	0.100	1.20	0.120	0.57	0.057	

1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only. 3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached. m4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

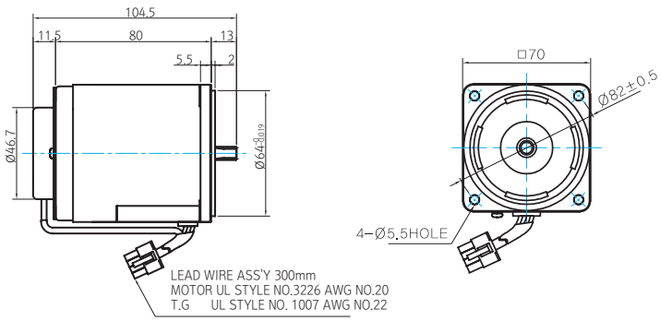
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
7SRDG*-15G	7GBK□BMH	1200	110	60	kgfcm	3.3	3.9	5.5	6.6	8.2	9.8	10.9	13.7	16.4	19.7	19.7	24.6	29.6	35.5	39.4	44.6	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
					N.m	0.32	0.39	0.54	0.64	0.80	0.96	1.07	1.34	1.61	1.93	1.93	2.41	2.90	3.48	3.86	4.37	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90
			220	60	kgfcm	3.3	3.9	5.5	6.6	8.2	9.8	10.9	13.7	16.4	19.7	19.7	24.6	29.6	35.5	39.4	44.6	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
					N.m	0.32	0.39	0.54	0.64	0.80	0.96	1.07	1.34	1.61	1.93	1.93	2.41	2.90	3.48	3.86	4.37	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90
			220/240	50	kgfcm	2.4	2.9	4.1	4.9	6.1	7.3	8.1	10.1	12.2	14.6	14.6	18.3	21.9	26.3	29.2	33.0	39.6	49.5	50.0	50.0	50.0	50.0	50.0	50.0
					N.m	0.24	0.29	0.40	0.48	0.60	0.71	0.79	0.99	1.19	1.43	1.43	1.79	2.15	2.58	2.86	3.23	3.88	4.85	4.90	4.90	4.90	4.90	4.90	4.90
		90	110	60	kgfcm	1.3	1.6	2.2	2.7	3.3	4.0	4.5	5.6	6.7	8.0	8.0	10.0	12.0	14.5	16.1	18.2	21.8	27.2	32.7	36.3	43.6	50.0	50.0	50.0
					N.m	0.13	0.16	0.22	0.26	0.33	0.39	0.44	0.55	0.65	0.79	0.79	0.98	1.18	1.42	1.57	1.78	2.13	2.67	3.20	3.56	4.27	4.90	4.90	4.90
			220	60	kgfcm	1.3	1.6	2.2	2.7	3.3	4.0	4.5	5.6	6.7	8.0	8.0	10.0	12.0	14.5	16.1	18.2	21.8	27.2	32.7	36.3	43.6	50.0	50.0	50.0
					N.m	0.13	0.16	0.22	0.26	0.33	0.39	0.44	0.55	0.65	0.79	0.79	0.98	1.18	1.42	1.57	1.78	2.13	2.67	3.20	3.56	4.27	4.90	4.90	4.90
			220/240	50	kgfcm	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	31.5	35.0	42.0	50.0	50.0	50.0
					N.m	0.13	0.15	0.21	0.25	0.32	0.38	0.42	0.53	0.63	0.76	0.76	0.95	1.14	1.36	1.52	1.71	2.06	2.57	3.09	3.43	4.11	4.90	4.90	4.90

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

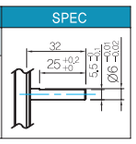
Dimensions

MOTOR ONLY

● MOTOR MODEL: 7SRD□□-15 (NO FAN)



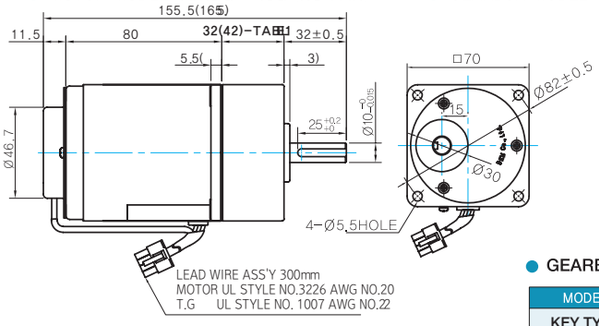
● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
7SRDD□-15-□	

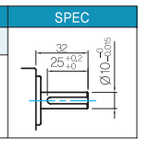
GEARED MOTOR

G TYPE GEARBOX

- MOTOR MODEL: 7SRDG□-15G (NO FAN)
- GEARBOX MODEL: 7GBK□BMH



- GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
7GBK□BMH	

WEIGHT

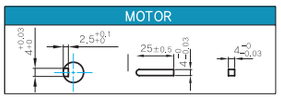
PART		WEIGHT(kg)
MOTOR		1.20
GEAR BOX	7GBK3BMH - 7GBK18BMH	0.38
	7GBK20BMH - 7GBK40BMH	0.48
	7GBK50BMH - 7GBK200BMH	0.53

*The output flange and shaft are sold separately.

- 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH – 7GBK18BMH
42	7GBK20BMH – 7GBK200BMH

- KEY SPEC

MOTOR


Motor Images

7SRDD□-15	7SRDG□-15G+7GBK□BMH

15W Speed Control Reversible Motor 15W(□ 80mm)

Motor Specification

Model 8SBDG*-15□-C(L): Gear Type Shaft 8SBDD*-15-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
8SRD◇1(A)-15□-C	8SRD◇1(A)-15□-L	15	1ø110	60	4	30min.	90-1700	0.85	0.085	1.40	0.140	0.50	0.050	6.0 / 250
8SRD◇B-15□-C	8SRD◇B-15□-L	15	1ø100	50	4	30min.	90-1400	0.75	0.075	1.30	0.130	0.48	0.048	6.0 / 250
				60			90-1700	0.75	0.075	1.30	0.130	0.48	0.048	
8SRD◇C-15□-C	8SRD◇C-15□-L	15	1ø200	50	4	30min.	90-1400	0.75	0.075	1.30	0.130	0.48	0.048	1.5 / 450
				60			90-1700	0.75	0.075	1.30	0.130	0.48	0.048	
8SRD◇2(D)-15□-C	8SRD◇2(D)-15□-L	15	1ø220	60	4	30min.	90-1700	0.85	0.085	1.40	0.140	0.50	0.050	1.5 / 450
8SRD◇E-15□-C	8SRD◇E-15□-L	15	1ø220	50	4	30min.	90-1400	0.75	0.075	1.30	0.130	0.48	0.048	1.5 / 450
			1ø240					0.85	0.085	1.40	0.140	0.52	0.052	

1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only. 3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	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	200	250	300	360
8SRDG*-15G	8GBK□BMH	1200	110	60	kgfcm	3.4	4.1	5.7	6.8	8.5	10.2	11.3	14.2	17.0	20.4	20.4	25.6	30.7	36.8	40.9	46.2	55.4	69.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	0.33	0.40	0.56	0.67	0.83	1.00	1.11	1.39	1.67	2.00	2.00	2.50	3.00	3.61	4.01	4.53	5.43	6.79	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220	60	kgfcm	3.4	4.1	5.7	6.8	8.5	10.2	11.3	14.2	17.0	20.4	20.4	25.6	30.7	36.8	40.9	46.2	55.4	69.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	0.33	0.40	0.56	0.67	0.83	1.00	1.11	1.39	1.67	2.00	2.00	2.50	3.00	3.61	4.01	4.53	5.43	6.79	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220/240	50	kgfcm	3.4	4.1	5.7	6.8	8.5	10.2	11.3	14.2	17.0	20.4	20.4	25.6	30.7	36.8	40.9	46.2	55.4	69.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	0.33	0.40	0.56	0.67	0.83	1.00	1.11	1.39	1.67	2.00	2.00	2.50	3.00	3.61	4.01	4.53	5.43	6.79	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
		90	110	60	kgfcm	1.2	1.5	2.0	2.4	3.0	3.6	4.1	5.1	6.1	7.3	7.3	9.1	11.0	13.1	14.6	16.5	19.8	24.8	29.7	33.0	39.6	49.5	59.4	66.0	80.0	80.0	80.0
					N.m	0.12	0.14	0.20	0.24	0.30	0.36	0.40	0.50	0.60	0.71	0.72	0.89	1.07	1.29	1.43	1.62	1.94	2.43	2.91	3.23	3.88	4.85	5.82	6.47	7.84	7.84	7.84
			220	60	kgfcm	1.2	1.5	2.0	2.4	3.0	3.6	4.1	5.1	6.1	7.3	7.3	9.1	11.0	13.1	14.6	16.5	19.8	24.8	29.7	33.0	39.6	49.5	59.4	66.0	80.0	80.0	80.0
					N.m	0.12	0.14	0.20	0.24	0.30	0.36	0.40	0.50	0.60	0.71	0.72	0.89	1.07	1.29	1.43	1.62	1.94	2.43	2.91	3.23	3.88	4.85	5.82	6.47	7.84	7.84	7.84
			220/240	50	kgfcm	1.3	1.5	2.1	2.5	3.2	3.8	4.2	5.3	6.3	7.6	7.6	9.5	11.4	13.7	15.2	17.2	20.6	25.7	30.9	34.3	41.2	51.5	61.8	68.6	80.0	80.0	80.0
					N.m	0.12	0.15	0.21	0.25	0.31	0.37	0.41	0.52	0.62	0.74	0.74	0.93	1.12	1.34	1.49	1.68	2.02	2.52	3.03	3.36	4.04	5.05	6.05	6.73	7.84	7.84	7.84

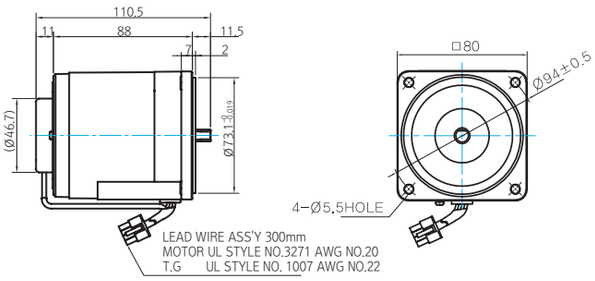
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
8SRDG*-15W	8WD□BL/□BR/□BRL	1200	110	60	kgfcm	11.5	13.4	16.2	18.6	24.5	27.7	32.3	42.0	46.2
					N.m	1.13	1.32	1.58	1.83	2.40	2.72	3.16	4.12	4.53
			220	60	kgfcm	11.6	13.9	17.4	20.9	29.1	34.9	41.8	58.1	69.7
					N.m	1.14	1.37	1.71	2.05	2.85	3.42	4.10	5.69	6.83
			220/240	50	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
		90	110	60	kgfcm	4.1	4.8	5.8	6.7	8.8	9.9	11.5	15.0	16.5
					N.m	0.40	0.47	0.57	0.65	0.86	0.97	1.13	1.47	1.62
			220	60	kgfcm	4.1	4.8	5.8	6.7	8.8	9.9	11.5	15.0	16.5
					N.m	0.40	0.47	0.57	0.65	0.86	0.97	1.13	1.47	1.62
			220/240	50	kgfcm	4.3	5.0	6.0	6.9	9.1	10.3	12.0	15.6	17.2
					N.m	0.42	0.49	0.59	0.68	0.89	1.01	1.17	1.53	1.68

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

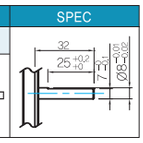
Dimensions

MOTOR ONLY

- MOTOR MODEL: 8SRD□□–15 (NO FAN)

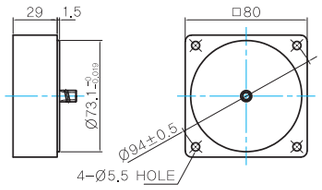


- MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
8SRDD□-15-□	

INTER-DECIMAL GEARBOX

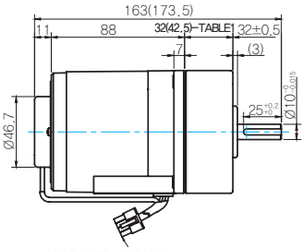
- MODEL: 8XD10□□



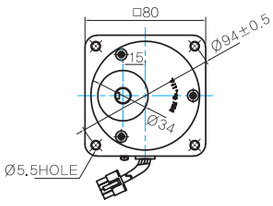
GEARED MOTOR

G TYPE GEARBOX

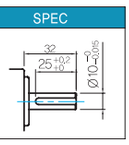
- MOTOR MODEL: 8SRDG□–15G (NO FAN)



- GEARBOX MODEL: 8GBK□BMH



- GEARBOX OUTPUT SHAFT

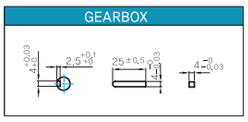
MODEL	SPEC
KEY TYPE	
8GBK□BMH	

- 32(42.5)-Table1

SIZE(mm)	GEAR RATIO
32	8GBK3BMH – 8GBK18BMH
42.5	8GBK20BMH – 8GBK360BMH

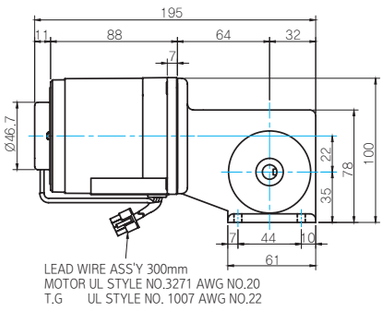
- KEY SPEC

GEARBOX

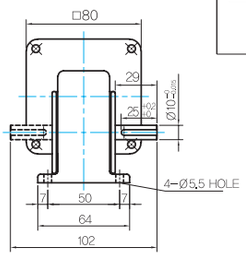


W TYPE GEARBOX

- MOTOR MODEL: 8SRDG□–15W (NO FAN)

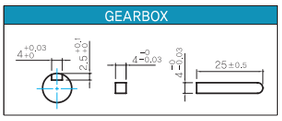


- GEARBOX MODEL: 8WD□BL/BR/BRL



- KEY SPEC

GEARBOX



WEIGHT

PART		WEIGHT(kg)
MOTOR		1.66
GEAR BOX	8GBK3BMH – 8GBK18BMH	0.56
	8GBK20BMH – 8GBK40BMH	0.65
	8GBK50BMH – 8GBK360BMH	0.72
	8WD□BL/BR/BRL	0.68
	8XD10○○	0.45

*The output flange and shaft are sold separately.

S.C. Reversible Motor 15W (□ 80mm)

Motor Images

8SRDD□-15	8SRDG□-15G+8GBK□BMH	8SRDG□-15W+8WD□BL

25W Speed Control Reversible Motor 25W(□ 80mm)

Motor Specification

Model 8SRDG*-25□-C(L): Gear Type Shaft 8SRDD*-25-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
8SRD◇1(A)-25□-C	8SRD◇1(A)-25□-L	25	1ø110	60	4	30min.	90-1700	1.80	0.180	2.30	0.230	0.60	0.060	10.0 / 250
8SRD◇B-25□-C	8SRD◇B-25□-L	25	1ø100	50	4	30min.	90-1400	1.70	0.170	2.20	0.220	0.58	0.058	10.0 / 250
				60			90-1700	1.70	0.170	2.20	0.220	0.58	0.058	
8SRD◇C-25□-C	8SRD◇C-25□-L	25	1ø200	50	4	30min.	90-1400	1.70	0.170	2.20	0.220	0.58	0.058	2.5 / 450
				60			90-1700	1.70	0.170	2.20	0.220	0.58	0.058	
8SRD◇2(D)-25□-C	8SRD◇2(D)-25□-L	25	1ø220	60	4	30min.	90-1700	1.80	0.180	2.30	0.230	0.60	0.060	2.5 / 450
8SRD◇E-25□-C	8SRD◇E-25□-L	25	1ø220	50	4	30min.	90-1400	1.60	0.160	2.10	0.210	0.55	0.055	2.5 / 450
			1ø240					1.80	0.180	2.30	0.230	0.65	0.065	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36
8SRDG*-25G	8GBK□BMH	1200	110	60	kgfcm	5.6	6.7	9.3	11.2	14.0	16.8	18.6	23.3	27.9	33.5	33.6	42.0	50.4	60.4
					N.m	0.55	0.66	0.91	1.10	1.37	1.64	1.83	2.28	2.74	3.29	3.29	4.11	4.94	5.92
			220	60	kgfcm	5.6	6.7	9.3	11.2	14.0	16.8	18.6	23.3	27.9	33.5	33.6	42.0	50.4	60.4
					N.m	0.55	0.66	0.91	1.10	1.37	1.64	1.83	2.28	2.74	3.29	3.29	4.11	4.94	5.92
			220/240	50	kgfcm	5.6	6.7	9.3	11.2	14.0	16.8	18.6	23.3	27.9	33.5	33.6	42.0	50.4	60.4
					N.m	0.55	0.66	0.91	1.10	1.37	1.64	1.83	2.28	2.74	3.29	3.29	4.11	4.94	5.92
		90	110	60	kgfcm	1.5	1.7	2.4	2.9	3.6	4.4	4.9	6.1	7.3	8.7	8.8	11.0	13.1	15.8
					N.m	0.14	0.17	0.24	0.29	0.36	0.43	0.48	0.60	0.71	0.86	0.86	1.07	1.29	1.55
			220	60	kgfcm	1.5	1.7	2.4	2.9	3.6	4.4	4.9	6.1	7.3	8.7	8.8	11.0	13.1	15.8
					N.m	0.14	0.17	0.24	0.29	0.36	0.43	0.48	0.60	0.71	0.86	0.86	1.07	1.29	1.55
			220/240	50	kgfcm	1.6	1.9	2.6	3.2	3.9	4.7	5.3	6.6	7.9	9.5	9.5	11.9	14.2	17.1
					N.m	0.15	0.19	0.26	0.31	0.39	0.46	0.52	0.64	0.77	0.93	0.93	1.16	1.40	1.67

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	40	50	60	75	90	100	120	150	180	200	250	300	360
8SRDG*-25G	8GBK□BMH	1200	110	60	kgfcm	67.2	75.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	6.58	7.44	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220	60	kgfcm	67.2	75.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	6.58	7.44	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220/240	50	kgfcm	67.2	75.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	6.58	7.44	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
		90	110	60	kgfcm	17.5	19.8	23.8	29.7	35.6	39.6	47.5	59.4	71.3	79.2	80.0	80.0	80.0
					N.m	1.72	1.94	2.33	2.91	3.49	3.88	4.66	5.82	6.99	7.76	7.84	7.84	7.84
			220	60	kgfcm	17.5	19.8	23.8	29.7	35.6	39.6	47.5	59.4	71.3	79.2	80.0	80.0	80.0
					N.m	1.72	1.94	2.33	2.91	3.49	3.88	4.66	5.82	6.99	7.76	7.84	7.84	7.84
			220/240	50	kgfcm	19.0	21.5	25.7	32.2	38.6	42.9	51.5	64.4	77.2	80.0	80.0	80.0	80.0
					N.m	1.86	2.10	2.52	3.15	3.78	4.20	5.05	6.31	7.57	7.84	7.84	7.84	7.84

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

B AC Motors

S.C. Reversible Motor 25W (□80mm)

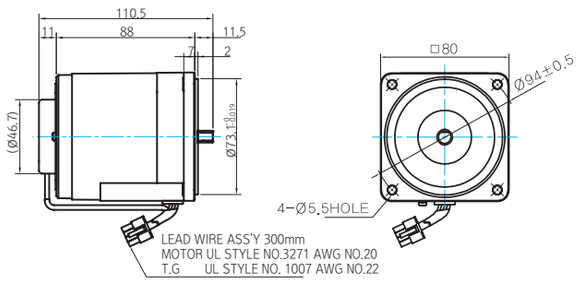
Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
8SRDG*-25W	8WD□BL/□BR/□BRL	1200	110	60	kgfcm	18.9	22.1	26.6	30.6	40.3	45.5	53.0	69.0	75.9
					N.m	1.85	2.16	2.60	3.00	3.94	4.46	5.19	6.76	7.44
			220	60	kgfcm	19.1	22.9	28.6	34.4	47.7	57.3	68.7	95.5	81.6
					N.m	1.87	2.24	2.81	3.37	4.68	5.61	6.73	9.35	8.00
			220/240	50	kgfcm	18.9	22.1	26.6	30.6	40.3	45.5	53.0	69.0	75.9
					N.m	1.85	2.16	2.60	3.00	3.94	4.46	5.19	6.76	7.44
		90	110	60	kgfcm	4.9	5.8	6.9	8.0	10.5	11.9	13.8	18.0	19.8
					N.m	0.48	0.56	0.68	0.78	1.03	1.16	1.35	1.76	1.94
			220	60	kgfcm	4.9	5.8	6.9	8.0	10.5	11.9	13.8	18.0	19.8
					N.m	0.48	0.56	0.68	0.78	1.03	1.16	1.35	1.76	1.94
			220/240	50	kgfcm	5.3	6.2	7.5	8.7	11.4	12.9	15.0	19.5	21.5
					N.m	0.52	0.61	0.74	0.85	1.11	1.26	1.47	1.91	2.10

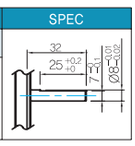
Dimensions

MOTOR ONLY

- MOTOR MODEL: 8SRD□□-25 (NO FAN)

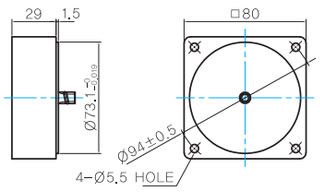


- MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
8SRDD□-25-□	

INTER-DECIMAL GEARBOX

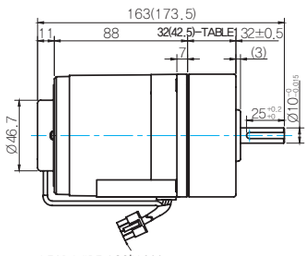
- MODEL: 8XD10□□



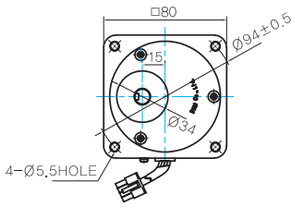
GEARED MOTOR

G TYPE GEARBOX

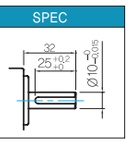
- MOTOR MODEL: 8SRDG□-25G (NO FAN)



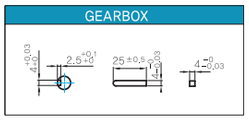
- GEARBOX MODEL: 8GBK□BMH



- GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
8GBK□BMH	

- KEY SPEC

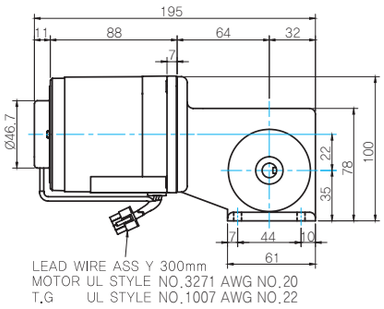
GEARBOX


- 32(42.5)-Table1

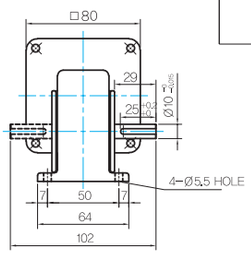
SIZE(mm)	GEAR RATIO
32	8GBK3BMH - 8GBK18BMH
42.5	8GBK20BMH - 8GBK360BMH

W TYPE GEARBOX

- MOTOR MODEL:
  8SRDG□–25W (NO FAN)

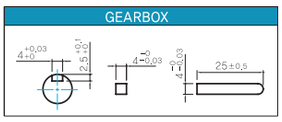


- GEARBOX MODEL:
  8WD□BL/BR/BRL



- KEY SPEC

GEARBOX



WEIGHT

PART		WEIGHT(kg)
MOTOR		1.66
GEAR BOX	8GBK3BMH – 8GBK18BMH	0.56
	8GBK20BMH – 8GBK40BMH	0.65
	8GBK50BMH – 8GBK360BMH	0.72
	8WD□BL/BR/BRL	0.68
	8XD10○○	0.45

*The output flange and shaft are sold separately.

Motor Images

8SRDD□–25	8SRDG□–25G+8GBK□BMH	8SRDG□–25W+8WD□BL

S.C. Reversible Motor 40W (□ 90mm)

40W Speed Control Reversible Motor 40W(□ 90mm)

Motor Specification

Model 9SRDG*-40□-C(L): Gear Type Shaft 9SRDD*-40-C(L): D-Cut Type Shaft 9SRDK*-40-C(L): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9SRD◇1(A)-40□-C	9SRD◇1(A)-40□-L	40	1ø110	60	4	30min.	90-1700	3.40	0.340	3.00	0.300	0.85	0.085	16.0 / 250
9SRD◇B-40□-C	9SRD◇B-40□-L	40	1ø100	50	4	30min.	90-1400	3.20	0.320	2.90	0.290	0.85	0.085	16.0 / 250
				60			90-1700	3.10	0.310	2.90	0.290	0.85	0.085	
9SRD◇C-40□-C	9SRD◇C-40□-L	40	1ø200	50	4	30min.	90-1400	3.20	0.320	2.90	0.290	0.85	0.085	4.0 / 450
				60			90-1700	3.10	0.310	2.90	0.290	0.85	0.085	
9SRD◇2(D)-40□-C	9SRD◇2(D)-40□-L	40	1ø220	60	4	30min.	90-1700	3.30	0.330	3.00	0.300	0.85	0.085	4.0 / 450
9SRD◇E-40□-C	9SRD◇E-40□-L	40	1ø220	50	4	30min.	90-1400	3.00	0.300	2.60	0.260	0.80	0.080	4.0 / 450
			1ø240					3.30	0.330	3.20	0.320	0.90	0.090	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	2	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
9SRDG*-40G	9GBK□BMH	1200	110	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	30.4	36.5	43.7	43.8	54.8	65.7	78.8	87.6	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.98	3.57	4.29	4.29	5.37	6.44	7.73	8.58	9.70	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
			220	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	30.4	36.5	43.7	43.8	54.8	65.7	78.8	87.6	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.98	3.57	4.29	4.29	5.37	6.44	7.73	8.58	9.70	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
			220/240	50	kgfcm	4.2	6.3	7.6	10.5	12.6	15.8	19.0	21.1	26.3	31.6	37.9	38.0	47.5	56.9	68.3	75.9	85.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					N.m	0.41	0.62	0.74	1.03	1.24	1.55	1.86	2.06	2.58	3.10	3.71	3.72	4.65	5.58	6.70	7.44	8.41	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
		90	110	60	kgfcm	1.4	2.1	2.5	3.4	4.1	5.2	6.2	6.9	8.6	10.3	12.4	12.4	15.5	18.6	22.3	24.8	28.1	33.7	42.1	50.5	56.1	67.3	84.2	100.0	100.0
					N.m	0.13	0.20	0.24	0.34	0.40	0.51	0.61	0.67	0.84	1.01	1.21	1.22	1.52	1.82	2.19	2.43	2.75	3.30	4.12	4.95	5.50	6.60	8.25	9.80	9.80
			220	60	kgfcm	1.4	2.1	2.5	3.4	4.1	5.2	6.2	6.9	8.6	10.3	12.4	12.4	15.5	18.6	22.3	24.8	28.1	33.7	42.1	50.5	56.1	67.3	84.2	100.0	100.0
					N.m	0.13	0.20	0.24	0.34	0.40	0.51	0.61	0.67	0.84	1.01	1.21	1.22	1.52	1.82	2.19	2.43	2.75	3.30	4.12	4.95	5.50	6.60	8.25	9.80	9.80
			220/240	50	kgfcm	1.3	1.9	2.3	3.2	3.9	4.9	5.8	6.5	8.1	9.7	11.7	11.7	14.6	17.5	21.0	23.4	26.4	31.7	39.6	47.5	52.8	63.4	79.2	95.0	100.0
					N.m	0.13	0.19	0.23	0.32	0.38	0.48	0.57	0.64	0.79	0.95	1.14	1.14	1.43	1.72	2.06	2.29	2.59	3.10	3.88	4.66	5.17	6.21	7.76	9.31	9.80

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SRDG*-40W	9WD□BL/□BR/□BRL	1200	110	60	kgfcm	24.6	28.8	34.7	40.0	52.5	59.4	69.1	90.0	99.0
					N.m	2.41	2.82	3.40	3.92	5.15	5.82	6.77	8.82	9.70
			220	60	kgfcm	24.9	29.9	37.4	44.8	62.3	74.7	89.6	124.5	122.4
					N.m	2.44	2.93	3.66	4.39	6.10	7.32	8.78	12.20	12.00
			220/240	50	kgfcm	26.2	30.7	37.0	42.6	56.0	63.4	73.7	96.0	105.6
					N.m	2.57	3.01	3.62	4.18	5.49	6.21	7.23	9.41	10.35
		90	110	60	kgfcm	7.0	8.2	9.8	11.3	14.9	16.8	19.6	25.5	28.1
					N.m	0.68	0.80	0.96	1.11	1.46	1.65	1.92	2.50	2.75
			220	60	kgfcm	7.0	8.2	9.8	11.3	14.9	16.8	19.6	25.5	28.1
					N.m	0.68	0.80	0.96	1.11	1.46	1.65	1.92	2.50	2.75
			220/240	50	kgfcm	7.4	8.6	10.4	12.0	15.8	17.8	20.7	27.0	29.7
					N.m	0.72	0.85	1.02	1.17	1.54	1.75	2.03	2.65	2.91

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

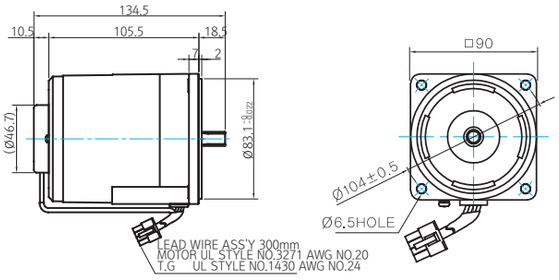
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30
9SRDG*-40P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5	59.4
					N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85	5.82
			220	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5	59.4
					N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85	5.82
			220/240	50	kgfcm	4.2	6.3	7.6	10.5	12.6	15.8	19.0	21.1	23.7	28.5	34.2	38.0	42.9	51.5
					N.m	0.41	0.62	0.74	1.03	1.24	1.55	1.86	2.06	2.33	2.79	3.35	3.72	4.20	5.05
		90	110	60	kgfcm	1.4	2.1	2.5	3.4	4.1	5.2	6.2	6.9	7.8	9.3	11.2	12.4	14.0	16.8
					N.m	0.13	0.20	0.24	0.34	0.40	0.51	0.61	0.67	0.76	0.91	1.09	1.22	1.37	1.65
			220	60	kgfcm	1.4	2.1	2.5	3.4	4.1	5.2	6.2	6.9	7.8	9.3	11.2	12.4	14.0	16.8
					N.m	0.13	0.20	0.24	0.34	0.40	0.51	0.61	0.67	0.76	0.91	1.09	1.22	1.37	1.65
			220/240	50	kgfcm	1.3	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.3	8.8	10.5	11.7	13.2	15.8
					N.m	0.13	0.19	0.23	0.32	0.38	0.48	0.57	0.64	0.72	0.86	1.03	1.14	1.29	1.55

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	36	40	50	60	75	90	100	120	150	180	200
9SRDG*-40P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	71.3	79.2	99.0	118.8	132.8	159.3	177.0	200.0	200.0	200.0	200.0
					N.m	6.99	7.76	9.70	11.64	13.01	15.61	17.35	19.60	19.60	19.60	19.60
			220	60	kgfcm	71.3	79.2	99.0	118.8	132.8	159.3	177.0	200.0	200.0	200.0	200.0
					N.m	6.99	7.76	9.70	11.64	13.01	15.61	17.35	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	61.8	68.6	85.8	103.0	115.1	138.1	153.4	184.1	200.0	200.0	200.0
					N.m	6.05	6.73	8.41	10.09	11.27	13.53	15.03	18.04	19.60	19.60	19.60
		90	110	60	kgfcm	20.2	22.4	28.1	33.7	37.6	45.1	50.2	60.2	75.2	90.3	100.3
					N.m	1.98	2.20	2.75	3.30	3.69	4.42	4.91	5.90	7.37	8.85	9.83
			220	60	kgfcm	20.2	22.4	28.1	33.7	37.6	45.1	50.2	60.2	75.2	90.3	100.3
					N.m	1.98	2.20	2.75	3.30	3.69	4.42	4.91	5.90	7.37	8.85	9.83
			220/240	50	kgfcm	19.0	21.1	26.4	31.7	35.4	42.5	47.2	56.6	70.8	85.0	94.4
					N.m	1.86	2.07	2.59	3.10	3.47	4.16	4.63	5.55	6.94	8.33	9.25

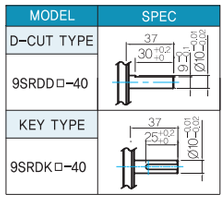
Dimensions

MOTOR ONLY

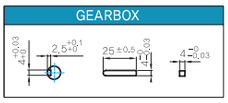
● MOTOR MODEL: 9SRD□□-40 (NO FAN)



● MOTOR OUTPUT SHAFT

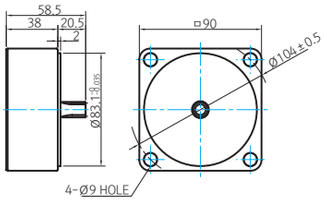


● KEY SPEC



INTER-DECIMAL GEARBOX

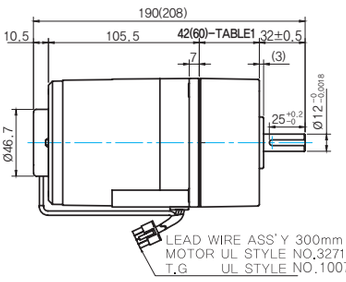
● MODEL: 9XD10□□



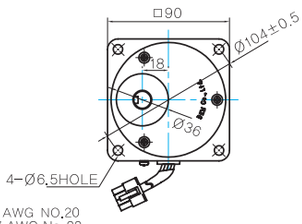
GEARED MOTOR

G TYPE GEARBOX

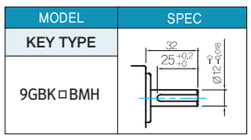
● MOTOR MODEL: 9SRDG□-40G (NO FAN)



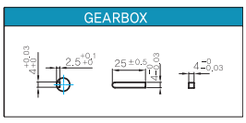
● GEARBOX MODEL: 9GBK□BMH



● GEARBOX OUTPUT SHAFT



● KEY SPEC



● 42(60)-Table1

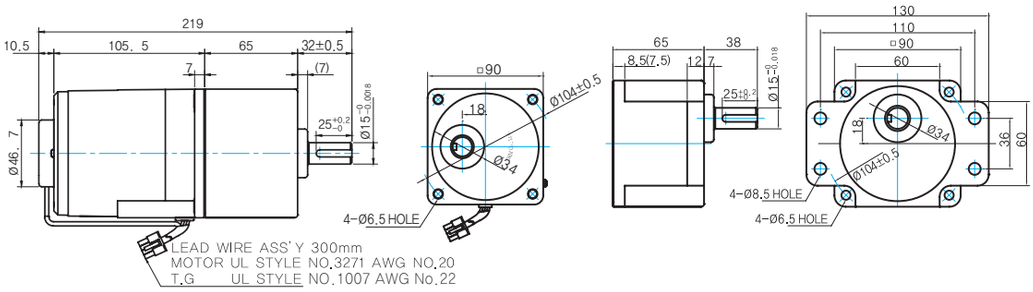
SIZE(mm)	GEAR RATIO
42	9GBK2BMH – 9GBK18BMH
60	9GBK20BMH – 9GBK200BMH

B AC Motors

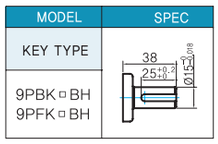
S.C. Reversible Motor 40W (□90mm)

P TYPE GEARBOX

- MOTOR MODEL: 9SRDG□-40P (NO FAN)
- GEARBOX MODEL: 9PBK□BH
- GEARBOX MODEL: 9PFK□BH

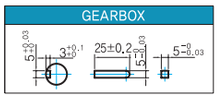


- GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

- KEY SPEC

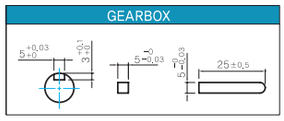
GEARBOX

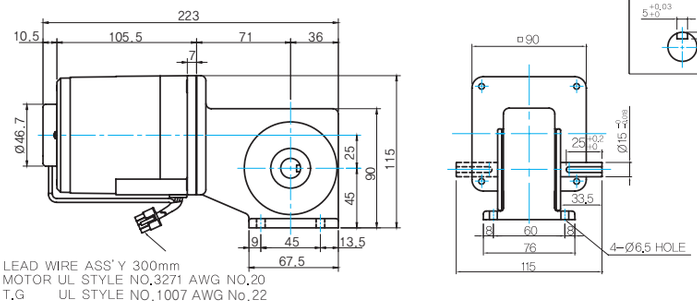


W TYPE GEARBOX

- MOTOR MODEL: 9SRDG□-40W (NO FAN)
- GEARBOX MODEL: 9WD□BL/BR/BRL
- KEY SPEC

GEARBOX





WEIGHT

PART		WEIGHT(kg)
MOTOR		2.55
GEAR BOX	9GBK2BMH - 9GBK18BMH	0.78
	9GBK20BMH - 9GBK40BMH	1.10
	9GBK50BMH - 9GBK200BMH	1.20
	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9WD□BL/BR/BRL	1.00
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9SRDD□-40	9SRDG□-40G+9GBK□BMH	9SRDG□-40P+9PBK□BH	9SRDG□-40W+9WD□BL

60W Speed Control Reversible Motor 60W(□ 90mm)

Motor Specification

Model 9SRDG*-60F2□-C(L): Gear Type Shaft 9SRDD*-60F2-C(L): D-Cut Type Shaft 9SRDK*-60F2-C(L): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9SRD◇1(A)-60F2□-C	9SRD◇1(A)-60F2□-L	60	1ø110	60	4	30min.	90-1700	5.00	0.500	5.40	0.540	2.80	0.280	20.0 / 250
9SRD◇B-60F2□-C	9SRD◇B-60F2□-L	60	1ø100	50	4	30min.	90-1400	5.20	0.520	5.50	0.550	2.80	0.280	25.0 / 250
				60			90-1700	5.00	0.500	5.40	0.540	2.80	0.280	
9SRD◇C-60F2□-C	9SRD◇C-60F2□-L	60	1ø200	50	4	30min.	90-1400	5.00	0.500	5.20	0.520	2.70	0.270	6.0 / 450
				60			90-1700	4.90	0.490	5.20	0.520	2.70	0.270	
9SRD◇2(D)-60F2□-C	9SRD◇2(D)-60F2□-L	60	1ø220	60	4	30min.	90-1700	5.00	0.500	5.30	0.530	2.70	0.270	6.0 / 450
9SRD◇E-60F2□-C	9SRD◇E-60F2□-L	60	1ø220	50	4	30min.	90-1400	5.00	0.500	5.20	0.520	2.70	0.270	6.0 / 450
			1ø240					5.50	0.550	5.80	0.580	2.90	0.290	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20
9SRDG*-60F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	8.7	13.1	15.7	21.9	26.2	32.8	39.4	43.7	49.3	59.1	71.0	78.8
					N.m	0.86	1.29	1.54	2.14	2.57	3.21	3.86	4.29	4.83	5.79	6.95	7.73
			220	60	kgfcm	8.6	12.9	15.5	21.5	25.8	32.2	38.6	42.9	48.4	58.0	69.6	77.4
					N.m	0.84	1.26	1.51	2.10	2.52	3.16	3.79	4.21	4.74	5.69	6.82	7.58
			220/240	50	kgfcm	8.4	12.6	15.2	21.1	25.3	31.6	37.9	42.1	47.5	56.9	68.3	75.9
					N.m	0.83	1.24	1.49	2.06	2.48	3.10	3.71	4.13	4.65	5.58	6.70	7.44
		90	110	60	kgfcm	4.5	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9
					N.m	0.44	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01
			220	60	kgfcm	4.4	6.6	7.9	10.9	13.1	16.4	19.7	21.9	24.6	29.6	35.5	39.4
					N.m	0.43	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.41	2.90	3.48	3.86
			220/240	50	kgfcm	4.4	6.6	7.9	10.9	13.1	16.4	19.7	21.9	24.6	29.6	35.5	39.4
					N.m	0.43	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.41	2.90	3.48	3.86

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	25	30	36	40	50	60	75	90	100	120	150	180	200
9SRDG*-60F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	89.1	106.9	128.3	142.6	178.2	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	8.73	10.48	12.57	13.97	17.46	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	87.5	104.9	125.9	139.9	174.9	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	8.57	10.28	12.34	13.71	17.14	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	85.8	103.0	123.6	137.3	171.6	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	8.41	10.09	12.11	13.45	16.82	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
		90	110	60	kgfcm	46.2	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	200.0	200.0	200.0
					N.m	4.53	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	19.60	19.60	19.60
			220	60	kgfcm	44.6	53.5	64.2	71.3	89.1	106.9	119.5	143.4	159.3	191.2	200.0	200.0	200.0
					N.m	4.37	5.24	6.29	6.99	8.73	10.48	11.71	14.05	15.61	18.73	19.60	19.60	19.60
			220/240	50	kgfcm	44.6	53.5	64.2	71.3	89.1	106.9	119.5	143.4	159.3	191.2	200.0	200.0	200.0
					N.m	4.37	5.24	6.29	6.99	8.73	10.48	11.71	14.05	15.61	18.73	19.60	19.60	19.60

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

S.C. Reversible Motor 60W (□90mm)

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
9SRDG*-60F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	13.1	15.7	21.9	26.2	32.8	39.4	43.7	49.3	59.1	71.0	78.8	89.1
					N.m	1.29	1.54	2.14	2.57	3.21	3.86	4.29	4.83	5.79	6.95	7.73	8.73
			220	60	kgfcm	12.9	15.5	21.5	25.8	32.2	38.6	42.9	48.4	58.0	69.6	77.4	87.5
					N.m	1.26	1.51	2.10	2.52	3.16	3.79	4.21	4.74	5.69	6.82	7.58	8.57
			220/240	50	kgfcm	12.6	15.2	21.1	25.3	31.6	37.9	42.1	47.5	56.9	68.3	75.9	85.8
					N.m	1.24	1.49	2.06	2.48	3.10	3.71	4.13	4.65	5.58	6.70	7.44	8.41
		90	110	60	kgfcm	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2
					N.m	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53
			220	60	kgfcm	6.6	7.9	10.9	13.1	16.4	19.7	21.9	24.6	29.6	35.5	39.4	44.6
					N.m	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.41	2.90	3.48	3.86	4.37
			220/240	50	kgfcm	6.6	7.9	10.9	13.1	16.4	19.7	21.9	24.6	29.6	35.5	39.4	44.6
					N.m	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.41	2.90	3.48	3.86	4.37

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	190	200
9SRDG*-60F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	106.9	128.3	142.6	178.2	213.8	239.0	286.7	300.0	300.0	300.0	300.0	300.0
					N.m	10.48	12.57	13.97	17.46	20.96	23.42	28.10	29.40	29.40	29.40	29.40	29.40
			220	60	kgfcm	104.9	125.9	139.9	174.9	209.9	234.5	281.4	300.0	300.0	300.0	300.0	300.0
					N.m	10.28	12.34	13.71	17.14	20.57	22.98	27.58	29.40	29.40	29.40	29.40	29.40
			220/240	50	kgfcm	103.0	123.6	137.3	171.6	205.9	230.1	276.1	300.0	300.0	300.0	300.0	300.0
					N.m	10.09	12.11	13.45	16.82	20.18	22.55	27.06	29.40	29.40	29.40	29.40	29.40
		90	110	60	kgfcm	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	247.8	297.4	300.0
					N.m	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	24.28	29.14	29.40
			220	60	kgfcm	53.5	64.2	71.3	89.1	106.9	119.5	143.4	159.3	191.2	239.0	286.7	300.0
					N.m	5.24	6.29	6.99	8.73	10.48	11.71	14.05	15.61	18.73	23.42	28.10	29.40
			220/240	50	kgfcm	53.5	64.2	71.3	89.1	106.9	119.5	143.4	159.3	191.2	239.0	286.7	300.0
					N.m	5.24	6.29	6.99	8.73	10.48	11.71	14.05	15.61	18.73	23.42	28.10	29.40

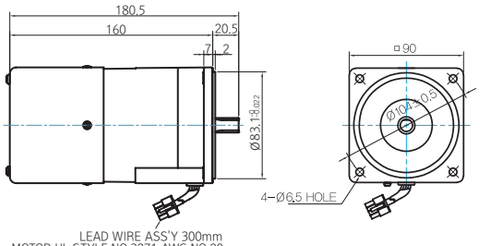
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SRDG*-60F2W	9WD□BL/□BR/□BRL	1200	110	60	kgfcm	44.3	51.8	62.4	71.9	94.5	106.9	124.4	142.9	122.4
					N.m	4.34	5.08	6.11	7.05	9.26	10.48	12.19	14.00	12.00
			220	60	kgfcm	43.5	50.9	61.2	70.6	92.8	104.9	122.1	142.9	122.4
					N.m	4.26	4.99	6.00	6.92	9.09	10.28	11.97	14.00	12.00
			220/240	50	kgfcm	47.6	55.7	67.0	77.3	101.5	114.8	133.6	142.9	122.4
					N.m	4.66	5.46	6.57	7.57	9.95	11.25	13.10	14.00	12.00
		90	110	60	kgfcm	23.0	26.9	32.3	37.3	49.0	55.4	64.5	84.0	92.4
					N.m	2.25	2.63	3.17	3.66	4.80	5.43	6.32	8.23	9.06
			220	60	kgfcm	22.1	25.9	31.2	36.0	47.3	53.5	62.2	81.0	89.1
					N.m	2.17	2.54	3.06	3.52	4.63	5.24	6.10	7.94	8.73
			220/240	50	kgfcm	23.8	27.8	33.5	38.6	50.8	57.4	66.8	87.0	95.7
					N.m	2.33	2.73	3.28	3.79	4.97	5.63	6.55	8.53	9.38

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	5	7.5	10	15	20	25	30	40	50	60	80
9SRDG*-60F2WH	9WHD□-030	1200	110	60	kgfcm	18.8	27.2	35.0	49.2	62.2	71.3	82.9	102.0	116.6	129.6	132.7
					N.m	1.84	2.67	3.43	4.83	6.10	6.99	8.13	9.99	11.43	12.70	13.00
			220	60	kgfcm	18.4	26.7	34.3	48.3	61.1	70.0	81.4	100.1	114.5	127.2	132.7
					N.m	1.81	2.62	3.37	4.74	5.98	6.86	7.98	9.81	11.22	12.47	13.00
			220/240	50	kgfcm	20.2	29.2	37.6	52.9	66.8	76.6	89.1	109.5	125.3	139.2	132.7
					N.m	1.98	2.86	3.68	5.18	6.55	7.50	8.73	10.73	12.28	13.64	13.00
		90	110	60	kgfcm	12.2	17.6	22.7	31.9	40.3	46.2	53.8	66.1	75.6	84.0	98.6
					N.m	1.19	1.73	2.22	3.13	3.95	4.53	5.27	6.48	7.41	8.23	9.66
			220	60	kgfcm	11.7	17.0	21.9	30.8	38.9	44.6	51.8	63.7	72.9	81.0	95.0
					N.m	1.15	1.67	2.14	3.02	3.81	4.37	5.08	6.24	7.14	7.94	9.31
			220/240	50	kgfcm	12.6	18.3	23.5	33.1	41.8	47.9	55.7	68.4	78.3	87.0	102.1
					N.m	1.24	1.79	2.30	3.24	4.09	4.69	5.46	6.71	7.67	8.53	10.00

Dimensions

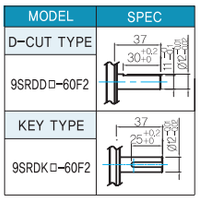
MOTOR ONLY

● MOTOR MODEL:
9SRD□□-60F2 (POWERFUL FAN)

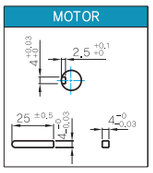


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1430 AWG NO.24

● MOTOR OUTPUT SHAFT

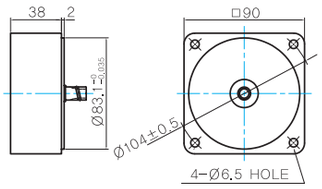
MODEL	SPEC
D-CUT TYPE	
9SRDD□-60F2	
KEY TYPE	
9SRDK□-60F2	

● KEY SPEC

MOTOR


INTER-DECIMAL GEARBOX

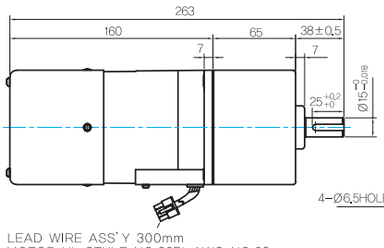
● MODEL: 9XD10□□



GEARED MOTOR

P TYPE GEARBOX

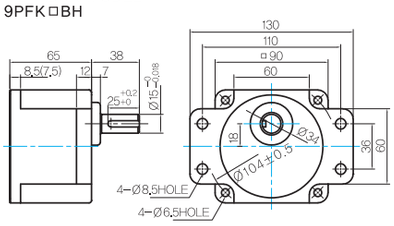
● MOTOR MODEL:
9SRDG□-60F2P (POWERFUL FAN)



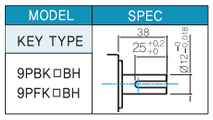
LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9PBK□BH

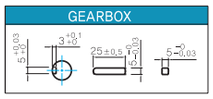
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

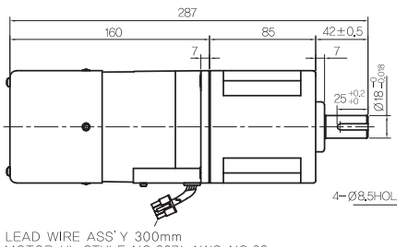
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

GEARBOX


H TYPE GEARBOX

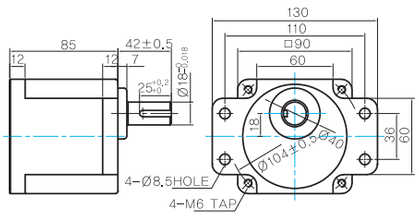
● MOTOR MODEL:
9SRDG□-60F2H (POWERFUL FAN)



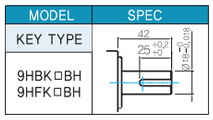
LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9HBK□BH

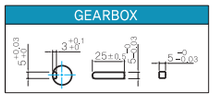
● GEARBOX MODEL:
9HFK□BH



● GEARBOX OUTPUT SHAFT

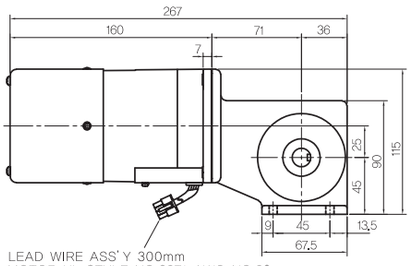
MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC

GEARBOX


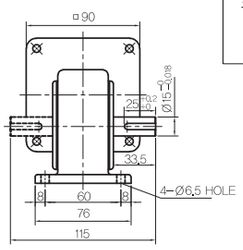
W TYPE GEARBOX

● MOTOR MODEL:
9SRDG□-60F2W (POWERFUL FAN)

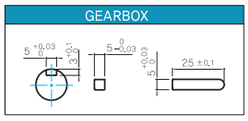


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9WD□BL/BR/BRL



● KEY SPEC

GEARBOX


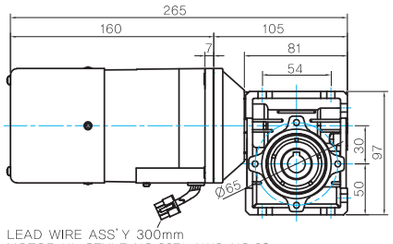
B AC Motors

S.C. Reversible Motor 60W (□90mm)

Dimensions

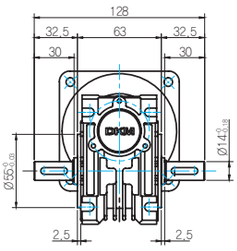
WH TYPE GEARBOX

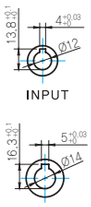
● MOTOR MODEL:
9SRDG□-60F2WH (POWERFUL FAN)



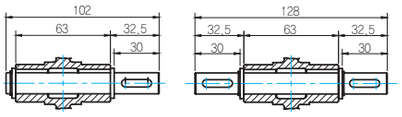
LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9WHD□-030



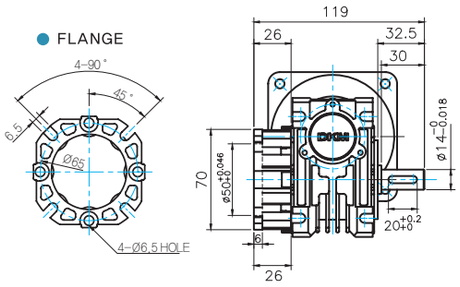


● SHAFT



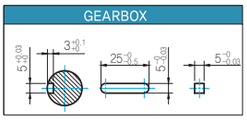
Unidirectional Bi-directional

● FLANGE



● KEY SPEC

GEARBOX



WEIGHT

PART		WEIGHT(kg)
MOTOR		3.15
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WD□BL/BR/BRL	1.00
	9WHD□-030	1.20
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9SRDD□-60F2

9SRDG□-60F2P+9PBK□BH

9SRDG□-60F2P+9PFK□BH

9SRDG□-60F2H+9HBK□BH

9SRDG□-60F2H+9HFK□BH

9SRDG□-60F2W+9WD□BL

9SRDG□-60F2WH+9WHD□-030

90W Speed Control Reversible Motor 90W(□ 90mm)

Motor Specification

Model 9SRDG*-90F2□-C(L): Gear Type Shaft 9SRDD*-90F2-C(L): D-Cut Type Shaft 9SRDK*-90F2-C(L): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9SRD◇1(A)-90F2□-C	9SRD◇1(A)-90F2□-L	90	1ø110	60	4	30min.	90-1700	6.00	0.600	7.30	0.730	3.00	0.300	25.0 / 250
9SRD◇B-90F2□-C	9SRD◇B-90F2□-L	90	1ø100	50	4	30min.	90-1400	6.30	0.630	7.60	0.760	3.30	0.330	30.0 / 250
				60			90-1700	6.20	0.620	7.40	0.740	3.30	0.330	
9SRD◇C-90F2□-C	9SRD◇C-90F2□-L	90	1ø200	50	4	30min.	90-1400	6.00	0.600	7.50	0.750	3.00	0.300	7.0 / 450
				60			90-1700	6.00	0.600	7.30	0.730	3.00	0.300	
9SRD◇2(D)-90F2□-C	9SRD◇2(D)-90F2□-L	90	1ø220	60	4	30min.	90-1700	6.00	0.600	7.30	0.730	3.00	0.300	6.5 / 450
9SRD◇E-90F2□-C	9SRD◇E-90F2□-L	90	1ø220	50	4	30min.	90-1400	5.50	0.550	7.00	0.700	2.80	0.280	6.5 / 450
			1ø240					6.00	0.600	7.50	0.750	3.30	0.330	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20
9SRDG*-90F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	11.8	17.7	21.3	29.6	35.5	44.3	53.2	59.1	66.6	79.9	95.9	106.6
					N.m	1.16	1.74	2.09	2.90	3.48	4.35	5.22	5.79	6.53	7.83	9.40	10.44
			220	60	kgfcm	11.8	17.7	21.3	29.6	35.5	44.3	53.2	59.1	66.6	79.9	95.9	106.6
					N.m	1.16	1.74	2.09	2.90	3.48	4.35	5.22	5.79	6.53	7.83	9.40	10.44
			220/240	50	kgfcm	11.3	17.0	20.4	28.4	34.0	42.5	51.0	56.7	63.9	76.7	92.0	102.2
					N.m	1.11	1.67	2.00	2.78	3.33	4.17	5.00	5.56	6.26	7.51	9.01	10.02
		90	110	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8
					N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29
			220	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8
					N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29
			220/240	50	kgfcm	4.5	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9
					N.m	0.44	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	25	30	36	40	50	60	75	90	100	120	150	180	200
9SRDG*-90F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	120.5	144.5	173.4	192.7	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	11.80	14.16	17.00	18.89	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	120.5	144.5	173.4	192.7	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	11.80	14.16	17.00	18.89	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	115.5	138.6	166.3	184.8	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	11.32	13.58	16.30	18.11	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
		90	110	60	kgfcm	49.5	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	200.0	200.0	200.0	200.0
					N.m	4.85	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	19.60	19.60	19.60	19.60
			220	60	kgfcm	49.5	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	200.0	200.0	200.0	200.0
					N.m	4.85	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	46.2	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	200.0	200.0	200.0
					N.m	4.53	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	19.60	19.60	19.60

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

S.C. Reversible Motor 90W (□90mm)

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
9SRDG*-90F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	17.7	21.3	29.6	35.5	44.3	53.2	59.1	66.6	79.9	95.9	106.6	120.5
					N.m	1.74	2.09	2.90	3.48	4.35	5.22	5.79	6.53	7.83	9.40	10.44	11.80
			220	60	kgfcm	17.7	21.3	29.6	35.5	44.3	53.2	59.1	66.6	79.9	95.9	106.6	120.5
					N.m	1.74	2.09	2.90	3.48	4.35	5.22	5.79	6.53	7.83	9.40	10.44	11.80
			220/240	50	kgfcm	17.0	20.4	28.4	34.0	42.5	51.0	56.7	63.9	76.7	92.0	102.2	115.5
					N.m	1.67	2.00	2.78	3.33	4.17	5.00	5.56	6.26	7.51	9.01	10.02	11.32
		90	110	60	kgfcm	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5
					N.m	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85
			220	60	kgfcm	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5
					N.m	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85
			220/240	50	kgfcm	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2
					N.m	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200
9SRDG*-90F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	144.5	173.4	192.7	240.9	289.1	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	14.16	17.00	18.89	23.61	28.33	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220	60	kgfcm	144.5	173.4	192.7	240.9	289.1	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	14.16	17.00	18.89	23.61	28.33	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220/240	50	kgfcm	138.6	166.3	184.8	231.0	277.2	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	13.58	16.30	18.11	22.64	27.17	29.40	29.40	29.40	29.40	29.40	29.40	29.40
		90	110	60	kgfcm	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	212.4	265.5	300.0	300.0
					N.m	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	20.82	26.02	29.40	29.40
			220	60	kgfcm	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	212.4	265.5	300.0	300.0
					N.m	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	20.82	26.02	29.40	29.40
			220/240	50	kgfcm	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	247.8	297.4	300.0
					N.m	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	24.28	29.14	29.40

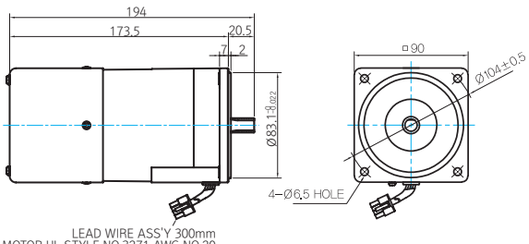
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SRDG*-90F2W	9WD□BL/□BR/□BRL	1200	110	60	kgfcm	59.9	70.1	84.3	97.2	127.8	144.5	153.1	142.9	122.4
					N.m	5.87	6.87	8.26	9.53	12.52	14.16	15.00	14.00	12.00
			220	60	kgfcm	59.9	70.1	84.3	97.2	127.8	144.5	153.1	142.9	122.4
					N.m	5.87	6.87	8.26	9.53	12.52	14.16	15.00	14.00	12.00
			220/240	50	kgfcm	61.5	72.0	86.6	99.9	131.3	148.5	153.1	142.9	122.4
					N.m	6.03	7.06	8.49	9.79	12.86	14.55	15.00	14.00	12.00
		90	110	60	kgfcm	24.6	28.8	34.7	40.0	52.5	59.4	69.1	90.0	99.0
					N.m	2.41	2.82	3.40	3.92	5.15	5.82	6.77	8.82	9.70
			220	60	kgfcm	24.6	28.8	34.7	40.0	52.5	59.4	69.1	90.0	99.0
					N.m	2.41	2.82	3.40	3.92	5.15	5.82	6.77	8.82	9.70
			220/240	50	kgfcm	27.1	31.7	38.1	44.0	57.8	65.3	76.0	99.0	108.9
					N.m	2.65	3.10	3.74	4.31	5.66	6.40	7.45	9.70	10.67

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	5	7.5	10	15	20	25	30	40	50	60	80
9SRG*-90F2WH	9WHD□-030	1200	110	60	kgfcm	25.4	36.8	47.3	66.6	84.1	96.4	112.1	137.8	157.7	163.3	132.7
					N.m	2.49	3.61	4.64	6.52	8.24	9.44	10.99	13.51	15.45	16.00	13.00
			220	60	kgfcm	25.4	36.8	47.3	66.6	84.1	96.4	112.1	137.8	157.7	163.3	132.7
					N.m	2.49	3.61	4.64	6.52	8.24	9.44	10.99	13.51	15.45	16.00	13.00
			220/240	50	kgfcm	26.1	37.8	48.6	68.4	86.4	99.0	115.2	141.6	162.0	163.3	132.7
					N.m	2.56	3.70	4.76	6.70	8.47	9.70	11.29	13.88	15.88	16.00	13.00
		90	110	60	kgfcm	10.4	15.1	19.4	27.4	34.6	39.6	46.1	56.6	64.8	72.0	84.5
					N.m	1.02	1.48	1.91	2.68	3.39	3.88	4.52	5.55	6.35	7.06	8.28
			220	60	kgfcm	10.4	15.1	19.4	27.4	34.6	39.6	46.1	56.6	64.8	72.0	84.5
					N.m	1.02	1.48	1.91	2.68	3.39	3.88	4.52	5.55	6.35	7.06	8.28
			220/240	50	kgfcm	11.5	16.6	21.4	30.1	38.0	43.6	50.7	62.3	71.3	79.2	92.9
					N.m	1.13	1.63	2.10	2.95	3.73	4.27	4.97	6.11	6.99	7.76	9.11

Dimensions

MOTOR ONLY

● MOTOR MODEL:
9SRD□□-90F2 (POWERFUL FAN)



LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1430 AWG NO.24

● MOTOR OUTPUT SHAFT

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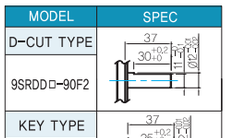
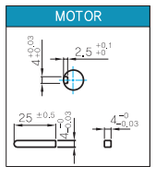
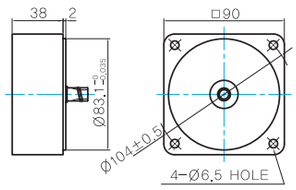
D-CUT TYPE	
9SRDD□-90F2	
KEY TYPE	
9SRDK□-90F2	

● KEY SPEC

MOTOR


INTER-DECIMAL GEARBOX

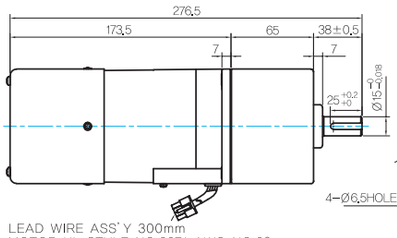
● MODEL: 9XD10□□



GEARED MOTOR

P TYPE GEARBOX

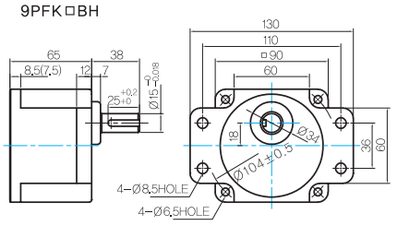
● MOTOR MODEL:
9SRDG□-90F2P (POWERFUL FAN)



LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9PBK□BH

● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

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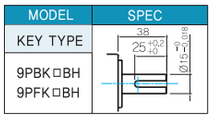
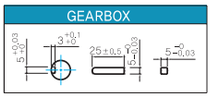
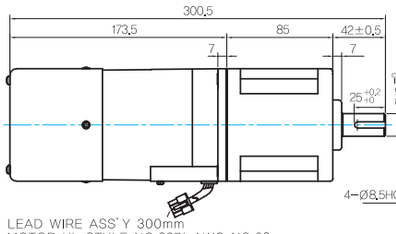
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

GEARBOX


H TYPE GEARBOX

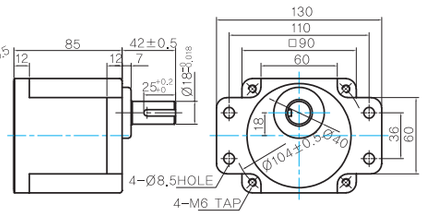
● MOTOR MODEL:
9SRDG□-90F2H (POWERFUL FAN)



LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9HBK□BH

● GEARBOX MODEL:
9HFK□BH



● GEARBOX OUTPUT SHAFT

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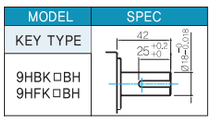
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC

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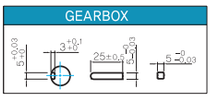
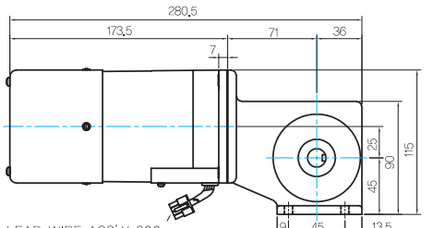


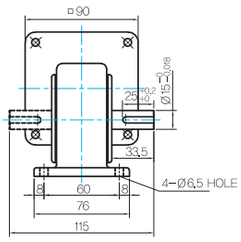
W TYPE GEARBOX

● MOTOR MODEL:
9SRDG□-90F2W (POWERFUL FAN)

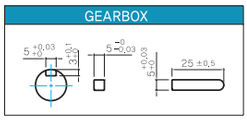


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9WD□BL/BR/BRL



● KEY SPEC

GEARBOX


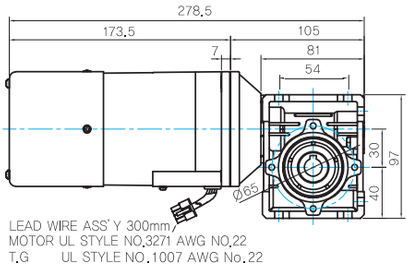
B AC Motors

S.C. Reversible Motor 90W (□90mm)

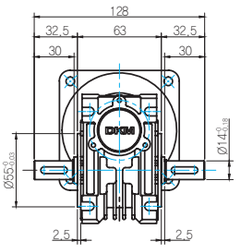
Dimensions

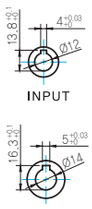
WH TYPE GEARBOX

● MOTOR MODEL:
9SRDG□-90F2WH (POWERFUL FAN)

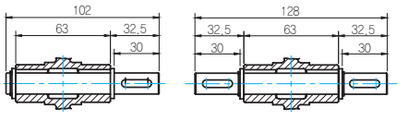


● GEARBOX MODEL:
9WHD□-030



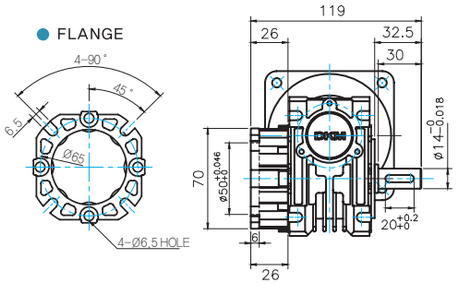


● SHAFT

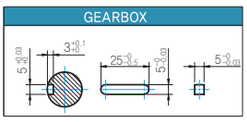


Unidirectional Bi-directional

● FLANGE



● KEY SPEC



WEIGHT

PART		WEIGHT(kg)
MOTOR		3.50
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WD□BL/BR/BRL	1.00
	9WHD□-030	1.20
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9SRDD□-90F2	9SRDG□-90F2P+9PBK□BH	9SRDG□-90F2P+9PFK□BH	9SRDG□-90F2H+9HBK□BH

9SRDG□-90F2H+9HFK□BH	9SRDG□-90F2W+9WD□BL	9SRDG□-90F2WH+9WHD□-030

120W Speed Control Reversible Motor 120W(□ 90mm)

Motor Specification

Model 9SRDG*-120F2□-C(L): Gear Type Shaft 9SRDD*-120F2-C(L): D-Cut Type Shaft 9SRDK*-120F2-C(L): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9SRD◇1(A)-120F2□-C	9SRD◇1(A)-120F2□-L	120	1ø110	60	4	30min.	90-1700	7.80	0.780	8.20	0.820	3.60	0.360	30.0 / 250
9SRD◇2(D)-120F2□-C	9SRD◇2(D)-120F2□-L	120	1ø220	60	4	30min.	90-1700	7.60	0.760	8.00	0.800	3.30	0.330	7.0 / 450
9SRD◇E-120F2□-C	9SRD◇E-120F2□-L	120	1ø220	50	4	30min.	90-1400	6.00	0.600	7.50	0.750	3.30	0.330	7.0 / 450
			1ø240					6.50	0.650	8.00	0.800	3.80	0.380	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20
9SRDG*-120F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	13.3	19.9	23.9	33.2	39.9	49.8	59.8	66.4	74.8	89.8	107.7	119.7
					N.m	1.30	1.95	2.34	3.25	3.91	4.88	5.86	6.51	7.33	8.80	10.56	11.73
			220	60	kgfcm	13.0	19.4	23.3	32.4	38.9	48.6	58.3	64.8	73.0	87.6	105.1	116.8
					N.m	1.27	1.91	2.29	3.18	3.81	4.76	5.72	6.35	7.15	8.58	10.30	11.45
			220/240	50	kgfcm	12.2	18.2	21.9	30.4	36.5	45.6	54.7	60.8	68.4	82.1	98.6	109.5
					N.m	1.19	1.79	2.14	2.98	3.57	4.47	5.36	5.95	6.71	8.05	9.66	10.73
		90	110	60	kgfcm	5.8	8.7	10.5	14.6	17.5	21.9	26.2	29.2	32.9	39.4	47.3	52.6
					N.m	0.57	0.86	1.03	1.43	1.71	2.14	2.57	2.86	3.22	3.86	4.64	5.15
			220	60	kgfcm	5.3	8.0	9.6	13.4	16.0	20.0	24.1	26.7	30.1	36.1	43.4	48.2
					N.m	0.52	0.79	0.94	1.31	1.57	1.96	2.36	2.62	2.95	3.54	4.25	4.72
			220/240	50	kgfcm	5.3	8.0	9.6	13.4	16.0	20.0	24.1	26.7	30.1	36.1	43.4	48.2
					N.m	0.52	0.79	0.94	1.31	1.57	1.96	2.36	2.62	2.95	3.54	4.25	4.72

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	25	30	36	40	50	60	75	90	100	120	150	180	200
9SRDG*-120F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	135.3	162.4	194.8	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	13.26	15.91	19.09	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	132.0	158.4	190.1	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	12.94	15.52	18.63	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	123.8	148.5	178.2	198.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	12.13	14.55	17.46	19.40	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
		90	110	60	kgfcm	59.4	71.3	85.5	95.0	118.8	142.6	159.3	191.2	200.0	200.0	200.0	200.0	200.0
					N.m	5.82	6.99	8.38	9.31	11.64	13.97	15.61	18.73	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	54.5	65.3	78.4	87.1	108.9	130.7	146.0	175.2	194.7	200.0	200.0	200.0	200.0
					N.m	5.34	6.40	7.68	8.54	10.67	12.81	14.31	17.17	19.08	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	54.5	65.3	78.4	87.1	108.9	130.7	146.0	175.2	194.7	200.0	200.0	200.0	200.0
					N.m	5.34	6.40	7.68	8.54	10.67	12.81	14.31	17.17	19.08	19.60	19.60	19.60	19.60

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft
; a white background indicates the rotation in the opposite direction.

S.C. Reversible Motor 120W (□90mm)

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
9SRDG*-120F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	19.9	23.9	33.2	39.9	49.8	59.8	66.4	74.8	89.8	107.7	119.7	135.3
					N.m	1.95	2.34	3.25	3.91	4.88	5.86	6.51	7.33	8.80	10.56	11.73	13.26
			220	60	kgfcm	19.4	23.3	32.4	38.9	48.6	58.3	64.8	73.0	87.6	105.1	116.8	132.0
					N.m	1.91	2.29	3.18	3.81	4.76	5.72	6.35	7.15	8.58	10.30	11.45	12.94
			220/240	50	kgfcm	18.2	21.9	30.4	36.5	45.6	54.7	60.8	68.4	82.1	98.6	109.5	123.8
					N.m	1.79	2.14	2.98	3.57	4.47	5.36	5.95	6.71	8.05	9.66	10.73	12.13
		90	110	60	kgfcm	8.7	10.5	14.6	17.5	21.9	26.2	29.2	32.9	39.4	47.3	52.6	59.4
					N.m	0.86	1.03	1.43	1.71	2.14	2.57	2.86	3.22	3.86	4.64	5.15	5.82
			220	60	kgfcm	8.0	9.6	13.4	16.0	20.0	24.1	26.7	30.1	36.1	43.4	48.2	54.5
					N.m	0.79	0.94	1.31	1.57	1.96	2.36	2.62	2.95	3.54	4.25	4.72	5.34
			220/240	50	kgfcm	8.0	9.6	13.4	16.0	20.0	24.1	26.7	30.1	36.1	43.4	48.2	54.5
					N.m	0.79	0.94	1.31	1.57	1.96	2.36	2.62	2.95	3.54	4.25	4.72	5.34

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200
9SRDG*-120F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	162.4	194.8	216.5	270.6	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	15.91	19.09	21.22	26.52	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220	60	kgfcm	158.4	190.1	211.2	264.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	15.52	18.63	20.70	25.87	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220/240	50	kgfcm	148.5	178.2	198.0	247.5	297.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	14.55	17.46	19.40	24.26	29.11	29.40	29.40	29.40	29.40	29.40	29.40	29.40
		90	110	60	kgfcm	71.3	85.5	95.0	118.8	142.6	159.3	191.2	212.4	254.9	300.0	300.0	300.0
					N.m	6.99	8.38	9.31	11.64	13.97	15.61	18.73	20.82	24.98	29.40	29.40	29.40
			220	60	kgfcm	65.3	78.4	87.1	108.9	130.7	146.0	175.2	194.7	233.6	292.1	300.0	300.0
					N.m	6.40	7.68	8.54	10.67	12.81	14.31	17.17	19.08	22.90	28.62	29.40	29.40
			220/240	50	kgfcm	65.3	78.4	87.1	108.9	130.7	146.0	175.2	194.7	233.6	292.1	300.0	300.0
					N.m	6.40	7.68	8.54	10.67	12.81	14.31	17.17	19.08	22.90	28.62	29.40	29.40

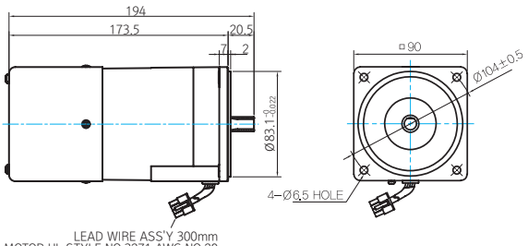
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SRDG*-120F2W	9WD□BL/□BR/□BRL	1200	110	60	kgfcm	67.2	78.7	94.7	109.2	143.5	162.4	153.1	142.9	122.4
					N.m	6.59	7.71	9.28	10.70	14.06	15.91	15.00	14.00	12.00
			220	60	kgfcm	65.6	76.8	92.4	106.6	140.0	158.4	153.1	142.9	122.4
					N.m	6.43	7.53	9.06	10.44	13.72	15.52	15.00	14.00	12.00
			220/240	50	kgfcm	61.5	72.0	86.6	99.9	131.3	148.5	153.1	142.9	122.4
					N.m	6.03	7.06	8.49	9.79	12.86	14.55	15.00	14.00	12.00
		90	110	60	kgfcm	29.5	34.6	41.6	48.0	63.0	71.3	82.9	108.0	122.4
					N.m	2.89	3.39	4.07	4.70	6.17	6.99	8.13	10.58	12.00
			220	60	kgfcm	27.1	31.7	38.1	44.0	57.8	65.3	76.0	99.0	122.4
					N.m	2.65	3.10	3.74	4.31	5.66	6.40	7.45	9.70	12.00
			220/240	50	kgfcm	27.1	31.7	38.1	44.0	57.8	65.3	76.0	99.0	122.4
					N.m	2.65	3.10	3.74	4.31	5.66	6.40	7.45	9.70	12.00

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	5	7.5	10	15	20	25	30	40	50	60	80
9SRDG*-120F2WH	9WHD□-030	1200	110	60	kgfcm	28.5	41.3	53.1	74.8	94.5	108.2	126.0	154.8	173.5	163.3	132.7
					N.m	2.80	4.05	5.21	7.33	9.26	10.61	12.34	15.17	17.00	16.00	13.00
			220	60	kgfcm	27.8	40.3	51.8	73.0	92.2	105.6	122.9	151.0	173.5	163.3	132.7
					N.m	2.73	3.95	5.08	7.15	9.03	10.35	12.04	14.80	17.00	16.00	13.00
			220/240	50	kgfcm	27.8	40.3	51.8	73.0	92.2	105.6	122.9	151.0	173.5	163.3	132.7
					N.m	2.73	3.95	5.08	7.15	9.03	10.35	12.04	14.80	17.00	16.00	13.00
		90	110	60	kgfcm	12.5	18.1	23.3	32.8	41.5	47.5	55.3	68.0	77.8	86.4	101.4
					N.m	1.23	1.78	2.29	3.22	4.06	4.66	5.42	6.66	7.62	8.47	9.93
			220	60	kgfcm	11.5	16.6	21.4	30.1	38.0	43.6	50.7	62.3	71.3	79.2	92.9
					N.m	1.13	1.63	2.10	2.95	3.73	4.27	4.97	6.11	6.99	7.76	9.11
			220/240	50	kgfcm	13.2	19.2	24.6	34.7	43.8	50.2	58.4	71.7	82.1	91.2	107.0
					N.m	1.30	1.88	2.41	3.40	4.29	4.92	5.72	7.03	8.04	8.94	10.49

Dimensions

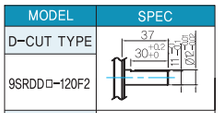
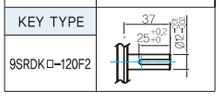
MOTOR ONLY

● MOTOR MODEL:
9SRD□□–120F2 (POWERFUL FAN)

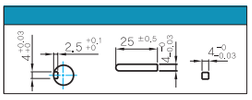


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1430 AWG NO.24

● MOTOR OUTPUT SHAFT

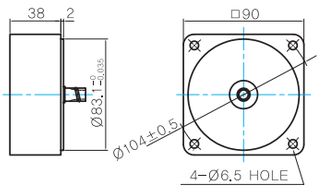
MODEL	SPEC
D-CUT TYPE	
9SRDD□–120F2	
KEY TYPE	
9SRDK□–120F2	

● KEY SPEC



INTER-DECIMAL GEARBOX

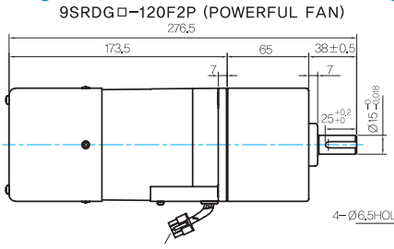
● MODEL: 9XD10□□



GEARED MOTOR

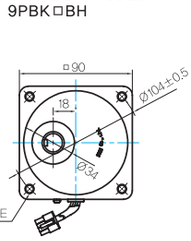
P TYPE GEARBOX

● MOTOR MODEL:
9SRDG□–120F2P (POWERFUL FAN)

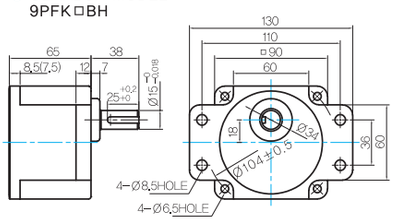


LEAD WIRE ASS Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

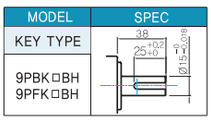
● GEARBOX MODEL:
9PBK□BH



● GEARBOX MODEL:
9PFK□BH

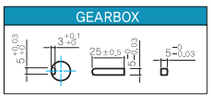


● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

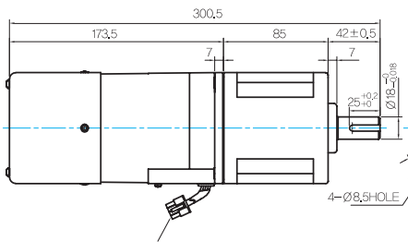
● KEY SPEC

GEARBOX



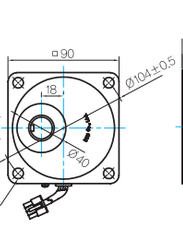
H TYPE GEARBOX

● MOTOR MODEL:
9SRDG□–120F2H (POWERFUL FAN)

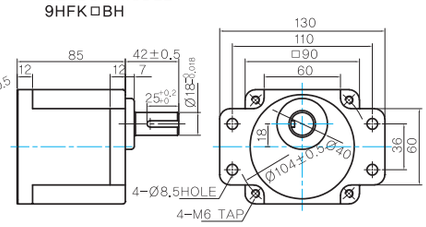


LEAD WIRE ASS Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

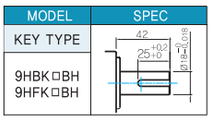
● GEARBOX MODEL:
9HBK□BH



● GEABOX MODEL:
9HFK□BH

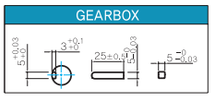


● GEARBOC OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

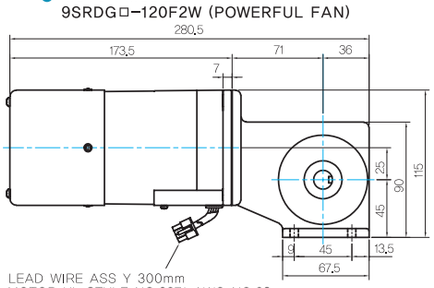
● KEY SPEC

GEARBOX



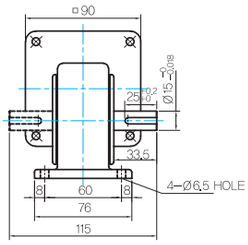
W TYPE GEARBOX

● MOTOR MODEL:
9SRDG□–120F2W (POWERFUL FAN)



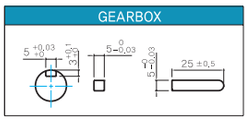
LEAD WIRE ASS Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9WD□BL/BR/BRL



● KEY SPEC

GEARBOX



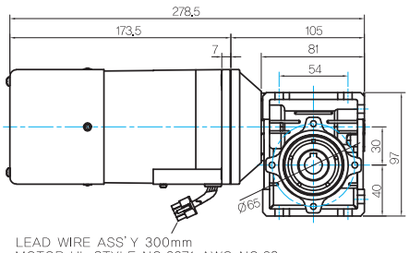
B AC Motors

S.C. Reversible Motor 120W (□90mm)

Dimensions

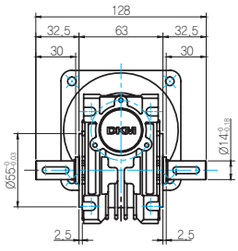
WH TYPE GEARBOX

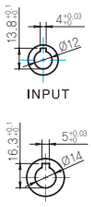
● MOTOR MODEL:
9SRDG□−120F2WH (POWERFUL FAN)



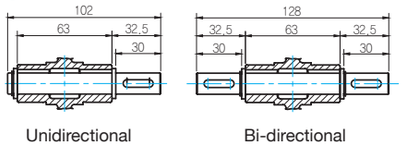
LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1007 AWG No.22

● GEARBOX MODEL:
9WHD□−030

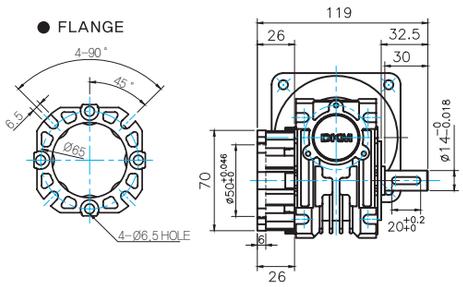




● SHAFT

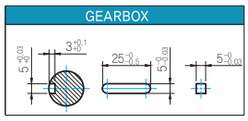


● FLANGE



● KEY SPEC

GEARBOX



WEIGHT

PART		WEIGHT(kg)
MOTOR		3.50
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WD□BL/BR/BRL	1.00
	9WHD□-030	1.20
	9XD10○○	0.60

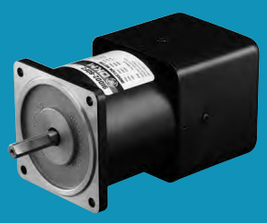
*The output flange and shaft are sold separately.

Motor Images

9SRDD□−120F2	9SRDG□−120F2P+9PBK□BH	9SRDG□−120F2P+9PFK□BH	9SRDG□−120F2H+9HBK□BH

9SRDG□−120F2H+9HFK□BH	9SRDG□−120F2W+9WD□BL	9SRDG□−120F2WH+9WHD□−030

Speed Control Brake Motor



Index

Speed Control Brake Motor 6W (□60mm)	B-289
Speed Control Brake Motor 6W (□70mm)	B-291
Speed Control Brake Motor 10W (□70mm)	B-293
Speed Control Brake Motor 15W (□70mm)	B-295
Speed Control Brake Motor 15W (□80mm)	B-297
Speed Control Brake Motor 25W (□80mm)	B-300
Speed Control Brake Motor 40W (□90mm)	B-303
Speed Control Brake Motor 60W (□90mm)	B-306
Speed Control Brake Motor 90W (□90mm)	B-310
Speed Control Brake Motor 120W (□90mm)	B-314
Speed Control Brake Motor 180W (□90mm)	B-318

B AC Motors

S.C. Brake Motor 6W (□60mm)

6W Speed Control Brake Motor 6W(□60mm)

Motor Specification

Model 6SBDG*-6G-C(L): Gear Type Shaft 6SBDD*-6-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
6SBD◇1(A)-6□-C	6SBD◇1(A)-6□-L	6	1ø110	60	4	30min.	90-1700	0.36	0.036	0.54	0.054	0.36	0.036	3.0 / 250
6SBD◇B-6□-C	6SBD◇B-6□-L	6	1ø100	50	4	30min.	90-1400	0.40	0.040	0.55	0.055	0.37	0.037	3.5 / 250
				60			90-1700	0.38	0.038	0.55	0.055	0.37	0.037	
6SBD◇C-6□-C	6SBD◇C-6□-L	6	1ø200	50	4	30min.	90-1400	0.40	0.040	0.55	0.055	0.37	0.037	1.0 / 450
				60			90-1700	0.38	0.038	0.55	0.055	0.37	0.037	
6SBD◇2(D)-6□-C	6SBD◇2(D)-6□-L	6	1ø220	60	4	30min.	90-1700	0.40	0.040	0.56	0.056	0.39	0.039	1.0 / 450
6SBD◇E-6□-C	6SBD◇E-6□-L	6	1ø220	50	4	30min.	90-1400	0.32	0.032	0.47	0.047	0.31	0.031	1.0 / 450
			1ø240					0.36	0.036	0.52	0.052	0.33	0.033	

1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type), and D-Cut Type Shaft is for using the motor only. 3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached. 4) Impedance Protected Type

Max. Permissible Torque at Output Shaft of Gearbox

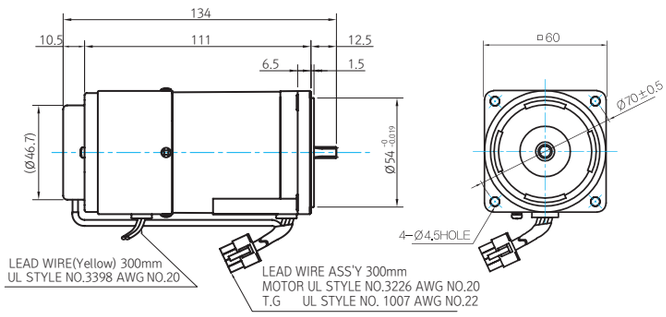
Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
6SBDG*-6G	6GBD □MH	1200	110	60	kgfcm	1.3	1.6	2.2	2.6	3.3	3.9	4.4	5.5	6.6	7.9	7.9	9.9	11.8	14.2	15.8	17.8	21.4	26.7	30.0	30.0	30.0	30.0	30.0	30.0	30.0
					N.m	0.13	0.15	0.21	0.26	0.32	0.39	0.43	0.54	0.64	0.77	0.77	0.97	1.16	1.39	1.55	1.75	2.10	2.62	2.94	2.94	2.94	2.94	2.94	2.94	2.94
			220	60	kgfcm	1.4	1.6	2.3	2.7	3.4	4.1	4.5	5.7	6.8	8.2	8.2	10.2	12.3	14.7	16.4	18.5	22.2	27.7	30.0	30.0	30.0	30.0	30.0	30.0	92.4
					N.m	0.13	0.16	0.22	0.27	0.33	0.40	0.44	0.56	0.67	0.80	0.80	1.00	1.20	1.44	1.60	1.81	2.17	2.72	2.94	2.94	2.94	2.94	2.94	2.94	9.06
			220/240	50	kgfcm	1.1	1.4	1.9	2.3	2.9	3.4	3.8	4.8	5.7	6.9	6.9	8.6	10.3	12.4	13.7	15.5	18.6	23.3	27.9	30.0	30.0	30.0	30.0	30.0	30.0
					N.m	0.11	0.13	0.19	0.22	0.28	0.34	0.37	0.47	0.56	0.67	0.67	0.84	1.01	1.21	1.34	1.52	1.82	2.28	2.74	2.94	2.94	2.94	2.94	2.94	2.94
		90	110	60	kgfcm	0.9	1.0	1.5	1.7	2.2	2.6	2.9	3.6	4.4	5.2	5.3	6.6	7.9	9.5	10.5	11.9	14.3	17.8	21.4	23.8	28.5	30.0	30.0	30.0	30.0
					N.m	0.09	0.10	0.14	0.17	0.21	0.26	0.29	0.36	0.43	0.51	0.52	0.64	0.77	0.93	1.03	1.16	1.40	1.75	2.10	2.33	2.79	2.94	2.94	2.94	2.94
			220	60	kgfcm	0.9	1.1	1.6	1.9	2.4	2.8	3.2	3.9	4.7	5.7	5.7	7.1	8.5	10.2	11.4	12.9	15.4	19.3	23.2	25.7	30.0	30.0	30.0	30.0	30.0
					N.m	0.09	0.11	0.15	0.19	0.23	0.28	0.31	0.39	0.46	0.56	0.56	0.70	0.84	1.00	1.12	1.26	1.51	1.89	2.27	2.52	2.94	2.94	2.94	2.94	2.94
			220/240	50	kgfcm	0.8	0.9	1.3	1.5	1.9	2.3	2.5	3.1	3.8	4.5	4.5	5.7	6.8	8.1	9.1	10.2	12.3	15.3	18.4	20.5	24.6	30.0	30.0	30.0	30.0
					N.m	0.07	0.09	0.12	0.15	0.18	0.22	0.25	0.31	0.37	0.44	0.44	0.55	0.67	0.80	0.89	1.00	1.20	1.50	1.80	2.01	2.41	2.94	2.94	2.94	2.94

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

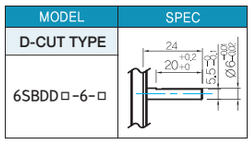
Dimensions

MOTOR ONLY

● MOTOR MODEL: 6SBD□□-6 (NO FAN)



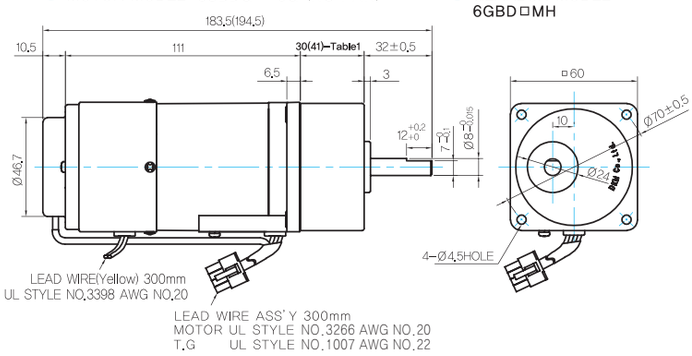
● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
6SBDD□-6-□	

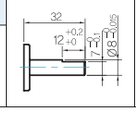
GEARED MOTOR

G TYPE GEARBOX

- MOTOR MODEL: 6SBDG□-6G (NO FAN)
- GEARBOX MODEL: 6GBD□MH



- GEARBOX OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
6GBD□MH	

- 30(41)-Table1

SIZE(mm)	GEAR RATIO
30	6GBD3MH – 6GBD18MH
41	6GBD25MH – 6GBD360MH

WEIGHT

PART		WEIGHT(kg)
MOTOR		1.22
GEAR BOX	6GBD3MH - 6GBD18MH	0.30
	6GBD20MH - 6GBD40MH	0.32
	6GBD50MH - 6GBD250MH	0.34

*The output flange and shaft are sold separately.

Motor Images

6SBDD□-6	6SBDG□-6G+6GBD□MH

6W Speed Control Brake Motor 6W(□70mm)

Motor Specification

Model 7SBDG*-6G-C(L): Gear Type Shaft 7SBDD*-6-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
7SBD◇1(A)-6□-C	7SBD◇1(A)-6□-L	6	1ø110	60	4	30min.	90-1700	0.37	0.037	0.54	0.054	0.36	0.036	3.0 / 250
7SBD◇B-6□-C	7SBD◇B-6□-L	6	1ø100	50	4	30min.	90-1400	0.40	0.040	0.55	0.055	0.37	0.037	3.5 / 250
				60			90-1700	0.40	0.040	0.55	0.055	0.38	0.038	
7SBD◇C-6□-C	7SBD◇C-6□-L	6	1ø200	50	4	30min.	90-1400	0.40	0.040	0.55	0.055	0.37	0.037	1.0 / 450
				60			90-1700	0.40	0.040	0.55	0.055	0.38	0.038	
7SBD◇2(D)-6□-C	7SBD◇2(D)-6□-L	6	1ø220	60	4	30min.	90-1700	0.41	0.041	0.56	0.056	0.39	0.039	1.0 / 450
7SBD◇E-6□-C	7SBD◇E-6□-L	6	1ø220	50	4	30min.	90-1400	0.32	0.032	0.47	0.047	0.31	0.031	1.0 / 450
			1ø240					0.36	0.036	0.52	0.052	0.33	0.033	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
7SBDG*-6G	7GBK□BMH	1200	110	60	kgfcm	1.3	1.6	2.2	2.6	3.3	3.9	4.4	5.5	6.6	7.9	7.9	9.9
					N.m	0.13	0.15	0.21	0.26	0.32	0.39	0.43	0.54	0.64	0.77	0.77	0.97
			220	60	kgfcm	1.4	1.6	2.3	2.7	3.4	4.1	4.5	5.7	6.8	8.2	8.2	10.2
					N.m	0.13	0.16	0.22	0.27	0.33	0.40	0.44	0.56	0.67	0.80	0.80	1.00
			220/240	50	kgfcm	1.1	1.4	1.9	2.3	2.9	3.4	3.8	4.8	5.7	6.9	6.9	8.6
					N.m	0.11	0.13	0.19	0.22	0.28	0.34	0.37	0.47	0.56	0.67	0.67	0.84
		90	110	60	kgfcm	0.9	1.0	1.5	1.7	2.2	2.6	2.9	3.6	4.4	5.2	5.3	6.6
					N.m	0.09	0.10	0.14	0.17	0.21	0.26	0.29	0.36	0.43	0.51	0.52	0.64
			220	60	kgfcm	0.9	1.1	1.6	1.9	2.4	2.8	3.2	3.9	4.7	5.7	5.7	7.1
					N.m	0.09	0.11	0.15	0.19	0.23	0.28	0.31	0.39	0.46	0.56	0.56	0.70
			220/240	50	kgfcm	0.8	0.9	1.3	1.5	1.9	2.3	2.5	3.1	3.8	4.5	4.5	5.7
					N.m	0.07	0.09	0.12	0.15	0.18	0.22	0.25	0.31	0.37	0.44	0.44	0.55

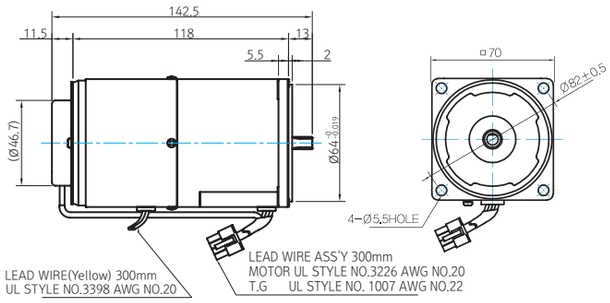
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200
7SBDG*-6G	7GBK□BMH	1200	110	60	kgfcm	11.8	14.2	15.8	17.8	21.4	26.7	32.1	35.6	42.8	50.0	50.0	50.0
					N.m	1.16	1.39	1.55	1.75	2.10	2.62	3.14	3.49	4.19	4.90	4.90	4.90
			220	60	kgfcm	12.3	14.7	16.4	18.5	22.2	27.7	33.3	37.0	44.4	50.0	50.0	50.0
					N.m	1.20	1.44	1.60	1.81	2.17	2.72	3.26	3.62	4.35	4.90	4.90	4.90
			220/240	50	kgfcm	10.3	12.4	13.7	15.5	18.6	23.3	27.9	31.0	37.2	46.5	50.0	50.0
					N.m	1.01	1.21	1.34	1.52	1.82	2.28	2.74	3.04	3.65	4.56	4.90	4.90
		90	110	60	kgfcm	7.9	9.5	10.5	11.9	14.3	17.8	21.4	23.8	28.5	35.6	42.8	47.5
					N.m	0.77	0.93	1.03	1.16	1.40	1.75	2.10	2.33	2.79	3.49	4.19	4.66
			220	60	kgfcm	8.5	10.2	11.4	12.9	15.4	19.3	23.2	25.7	30.9	38.6	46.3	51.5
					N.m	0.84	1.00	1.12	1.26	1.51	1.89	2.27	2.52	3.03	3.78	4.54	5.05
			220/240	50	kgfcm	6.8	8.1	9.1	10.2	12.3	15.3	18.4	20.5	24.6	30.7	36.8	40.9
					N.m	0.67	0.80	0.89	1.00	1.20	1.50	1.80	2.01	2.41	3.01	3.61	4.01

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

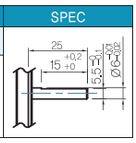
Dimensions

MOTOR ONLY

● MOTOR MODEL: 7SBD□□-6 (NO FAN)



● MOTOR OUTPUT SHAFT

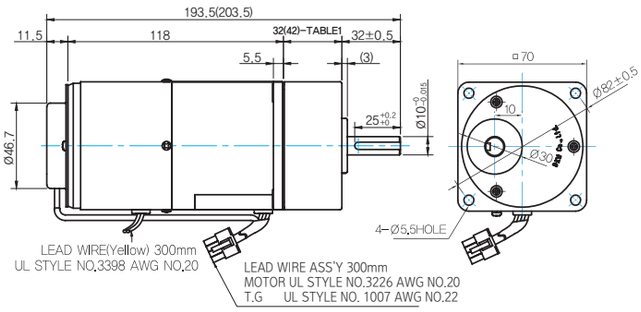
MODEL	SPEC
D-CUT TYPE	
7SBDD□-6-□	

GEARED MOTOR

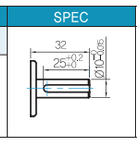
G TYPE GEARBOX

● MOTOR MODEL: 7SBDG□-6G (NO FAN)

● GEARBOX MODEL: 7GBK□BMH



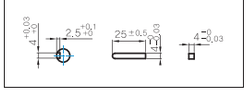
● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
7GBK□BMH	

● 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH – 7GBK18BMH
42	7GBK20BMH – 7GBK200BMH

● KEY SPEC

GEARBOX


WEIGHT

PART		WEIGHT(kg)
MOTOR		1.30
GEAR BOX	7GBK3BMH – 7GBK18BMH	0.38
	7GBK20BMH – 7GBK40BMH	0.48
	7GBK50BMH – 7GBK200BMH	0.53

*The output flange and shaft are sold separately.

Motor Images

7SBDD□-6	7SBDG□-6G+7GBK□BMH

10W Speed Control Brake Motor 10W(□70mm)

Motor Specification

Model 7SBDG*-10G-C(L): Gear Type Shaft 7SBDD*-10-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
7SBD◇1(A)-10□-C	7SBD◇1(A)-10□-L	10	1ø110	60	4	30min.	90-1700	0.60	0.060	0.75	0.075	0.42	0.042	3.5 / 250
7SBD◇B-10□-C	7SBD◇B-10□-L	10	1ø100	50	4	30min.	90-1400	0.60	0.060	0.75	0.075	0.42	0.042	5.0 / 250
				60			90-1700	0.60	0.060	0.75	0.075	0.42	0.042	
7SBD◇C-10□-C	7SBD◇C-10□-L	10	1ø200	50	4	30min.	90-1400	0.58	0.058	0.74	0.074	0.41	0.041	1.2 / 450
				60			90-1700	0.58	0.058	0.73	0.073	0.41	0.041	
7SBD◇2(D)-10□-C	7SBD◇2(D)-10□-L	10	1ø220	60	4	30min.	90-1700	0.60	0.060	0.75	0.075	0.42	0.042	1.2 / 450
7SBD◇E-10□-C	7SBD◇E-10□-L	10	1ø220	50	4	30min.	90-1400	0.58	0.058	0.74	0.074	0.41	0.041	1.2 / 450
			1ø240					0.62	0.062	0.76	0.076	0.42	0.042	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
7SBDG*-10G	7GBK□BMH	1200	110	60	kgfcm	1.8	2.2	3.0	3.6	4.6	5.5	6.1	7.6	9.1	10.9	11.0	13.7
					N.m	0.18	0.21	0.30	0.36	0.45	0.54	0.60	0.74	0.89	1.07	1.07	1.34
			220	60	kgfcm	1.8	2.2	3.0	3.6	4.6	5.5	6.1	7.6	9.1	10.9	11.0	13.7
					N.m	0.18	0.21	0.30	0.36	0.45	0.54	0.60	0.74	0.89	1.07	1.07	1.34
			220/240	50	kgfcm	1.8	2.2	3.0	3.6	4.5	5.4	6.0	7.5	9.0	10.8	10.8	13.5
					N.m	0.18	0.21	0.29	0.35	0.44	0.53	0.59	0.73	0.88	1.06	1.06	1.32
		90	110	60	kgfcm	1.0	1.2	1.7	2.0	2.6	3.1	3.4	4.3	5.1	6.1	6.1	7.7
					N.m	0.10	0.12	0.17	0.20	0.25	0.30	0.33	0.42	0.50	0.60	0.60	0.75
			220	60	kgfcm	1.0	1.2	1.7	2.0	2.6	3.1	3.4	4.3	5.1	6.1	6.1	7.7
					N.m	0.10	0.12	0.17	0.20	0.25	0.30	0.33	0.42	0.50	0.60	0.60	0.75
			220/240	50	kgfcm	1.0	1.2	1.7	2.0	2.5	3.0	3.3	4.2	5.0	6.0	6.0	7.5
					N.m	0.10	0.12	0.16	0.20	0.24	0.29	0.33	0.41	0.49	0.59	0.59	0.73

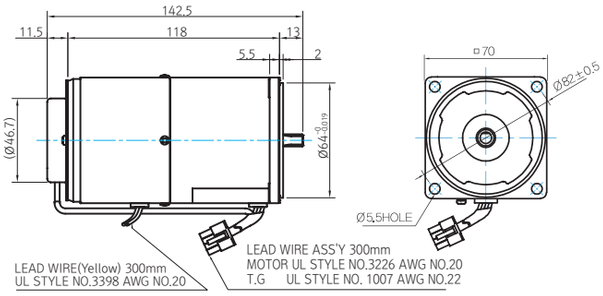
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200
7SBDG*-10G	7GBK□BMH	1200	110	60	kgfcm	16.4	19.7	21.9	24.8	29.7	37.1	44.6	49.5	50.0	50.0	50.0	50.0
					N.m	1.61	1.93	2.15	2.43	2.91	3.64	4.37	4.85	4.90	4.90	4.90	4.90
			220	60	kgfcm	16.4	19.7	21.9	24.8	29.7	37.1	44.6	49.5	50.0	50.0	50.0	50.0
					N.m	1.61	1.93	2.15	2.43	2.91	3.64	4.37	4.85	4.90	4.90	4.90	4.90
			220/240	50	kgfcm	16.2	19.4	21.6	24.4	29.3	36.6	44.0	48.8	50.0	50.0	50.0	50.0
					N.m	1.59	1.91	2.12	2.39	2.87	3.59	4.31	4.79	4.90	4.90	4.90	4.90
		90	110	60	kgfcm	9.2	11.0	12.3	13.9	16.6	20.8	24.9	27.7	33.3	41.6	49.9	50.0
					N.m	0.90	1.08	1.20	1.36	1.63	2.04	2.44	2.72	3.26	4.07	4.89	4.90
			220	60	kgfcm	9.2	11.0	12.3	13.9	16.6	20.8	24.9	27.7	33.3	41.6	49.9	50.0
					N.m	0.90	1.08	1.20	1.36	1.63	2.04	2.44	2.72	3.26	4.07	4.89	4.90
			220/240	50	kgfcm	9.0	10.8	12.0	13.5	16.2	20.3	24.4	27.1	32.5	40.6	48.7	50.0
					N.m	0.88	1.06	1.17	1.33	1.59	1.99	2.39	2.65	3.18	3.98	4.77	4.90

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

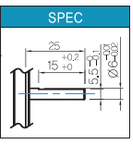
Dimensions

MOTOR ONLY

● MOTOR MODEL: 7SBD□□-10 (NO FAN)



● MOTOR OUTPUT SHAFT

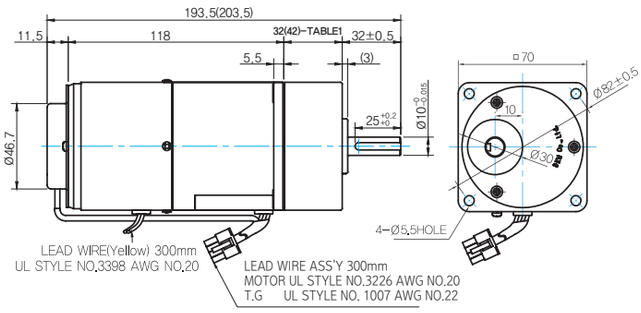
MODEL	SPEC
D-CUT TYPE	
7SBDD□-10-□	

GEARED MOTOR

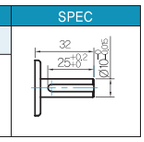
G TYPE GEARBOX

● MOTOR MODEL: 7SBDG□-10G (NO FAN)

● GEARBOX MODEL: 7GBK□BMH



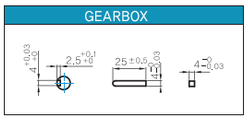
● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
7GBK□BMH	

● 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH – 7GBK18BMH
42	7GBK20BMH – 7GBK200BMH

● KEY SPEC

GEARBOX


WEIGHT

PART		WEIGHT(kg)
MOTOR		1.30
GEAR BOX	7GBK3BMH – 7GBK18BMH	0.38
	7GBK20BMH – 7GBK40BMH	0.48
	7GBK50BMH – 7GBK200BMH	0.53

*The output flange and shaft are sold separately.

Motor Images

7SBDD□-10	7SBDG□-10G+7GBK□BMH

S.C. Brake Motor 15W (□70mm)

15W Speed Control Brake Motor 15W(□70mm)

Motor Specification

Model 7SBDG*-15G-C(L): Gear Type Shaft 7SBDD*-15-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
7SBD◇1(A)-15G-C	7SBD◇1(A)-15G-L	15	1ø110	60	4	30min.	90-1700	1.00	0.100	1.35	0.135	0.55	0.055	6.0 / 250
7SBD◇B-15G-C	7SBD◇B-15G-L	15	1ø100	50	4	30min.	90-1400	0.90	0.090	1.10	0.110	0.54	0.054	6.0 / 250
				60			90-1700	0.90	0.090	1.25	0.125	0.54	0.054	
7SBD◇C-15G-C	7SBD◇C-15G-L	15	1ø200	50	4	30min.	90-1400	0.90	0.090	1.10	0.110	0.54	0.054	1.5 / 450
				60			90-1700	0.90	0.090	1.25	0.125	0.54	0.054	
7SBD◇2(D)-15G-C	7SBD◇2(D)-15G-L	15	1ø220	60	4	30min.	90-1700	1.00	0.100	1.35	0.135	0.55	0.055	1.5 / 450
7SBD◇E-15G-C	7SBD◇E-15G-L	15	1ø220	50	4	30min.	90-1400	0.80	0.080	1.00	0.100	0.53	0.053	1.5 / 450
			1ø240					1.00	0.100	1.20	0.120	0.57	0.057	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

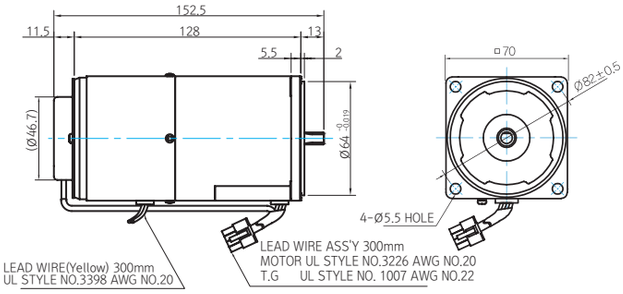
Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
7SBDG*-15G	7GBK □BMH	1200	110	60	kgfcm	3.3	3.9	5.5	6.6	8.2	9.8	10.9	13.7	16.4	19.7	19.7	24.6	29.6	35.5	39.4	44.6	53.5	66.8	50.0	50.0	50.0	50.0	50.0	50.0
					N.m	0.32	0.39	0.54	0.64	0.80	0.96	1.07	1.34	1.61	1.93	1.93	2.41	2.90	3.48	3.86	4.37	5.24	6.55	4.90	4.90	4.90	4.90	4.90	4.90
			220	60	kgfcm	3.3	3.9	5.5	6.6	8.2	9.8	10.9	13.7	16.4	19.7	19.7	24.6	29.6	35.5	39.4	44.6	53.5	66.8	50.0	50.0	50.0	50.0	50.0	50.0
					N.m	0.32	0.39	0.54	0.64	0.80	0.96	1.07	1.34	1.61	1.93	1.93	2.41	2.90	3.48	3.86	4.37	5.24	6.55	4.90	4.90	4.90	4.90	4.90	4.90
			220/240	50	kgfcm	2.4	2.9	4.1	4.9	6.1	7.3	8.1	10.1	12.2	14.6	14.6	18.3	21.9	26.3	29.2	33.0	39.6	49.5	50.0	50.0	50.0	50.0	50.0	50.0
					N.m	0.24	0.29	0.40	0.48	0.60	0.71	0.79	0.99	1.19	1.43	1.43	1.79	2.15	2.58	2.86	3.23	3.88	4.85	4.90	4.90	4.90	4.90	4.90	4.90
		90	110	60	kgfcm	1.3	1.6	2.2	2.7	3.3	4.0	4.5	5.6	6.7	8.0	8.0	10.0	12.0	14.5	16.1	18.2	21.8	27.2	32.7	36.3	43.6	50.0	50.0	50.0
					N.m	0.13	0.16	0.22	0.26	0.33	0.39	0.44	0.55	0.65	0.79	0.79	0.98	1.18	1.42	1.57	1.78	2.13	2.67	3.20	3.56	4.27	4.90	4.90	4.90
			220	60	kgfcm	1.3	1.6	2.2	2.7	3.3	4.0	4.5	5.6	6.7	8.0	8.0	10.0	12.0	14.5	16.1	18.2	21.8	27.2	32.7	36.3	43.6	50.0	50.0	50.0
					N.m	0.13	0.16	0.22	0.26	0.33	0.39	0.44	0.55	0.65	0.79	0.79	0.98	1.18	1.42	1.57	1.78	2.13	2.67	3.20	3.56	4.27	4.90	4.90	4.90
			220/240	50	kgfcm	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	31.5	35.0	42.0	50.0	50.0	50.0
					N.m	0.13	0.15	0.21	0.25	0.32	0.38	0.42	0.53	0.63	0.76	0.76	0.95	1.14	1.36	1.52	1.71	2.06	2.57	3.09	3.43	4.11	4.90	4.90	4.90

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

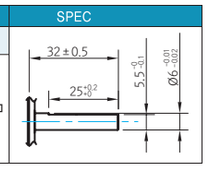
Dimensions

MOTOR ONLY

● MOTOR MODEL: 7SBD□□−15 (NO FAN)



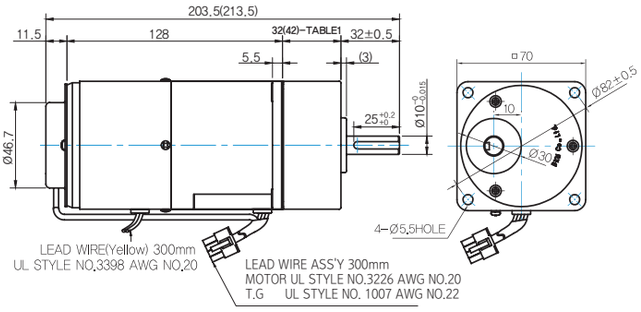
● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
7SBDD□-15-□	

GEARED MOTOR

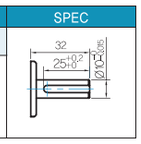
G TYPE GEARBOX

● MOTOR MODEL: 7SBDG□−15G (NO FAN)



● GEARBOX MODEL: 7GBK□BMH

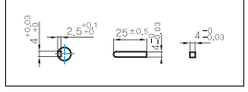
● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
7GBK□BMH	

● 32(42)-Table1

SIZE(mm)	GEAR RATIO
32	7GBK3BMH – 7GBK18BMH
42	7GBK20BMH – 7GBK200BMH

● KEY SPEC

GEARBOX


WEIGHT

PART		WEIGHT(kg)
MOTOR		1.60
GEAR BOX	7GBK3BMH – 7GBK18BMH	0.38
	7GBK20BMH – 7GBK40BMH	0.48
	7GBK50BMH – 7GBK200BMH	0.53

*The output flange and shaft are sold separately.

Motor Images

7SBDD□−15	7SBDG□−15G+7GBK□BMH

15W Speed Control Brake Motor 15W(□80mm)

Motor Specification

Model 8SBDG*-15□-C(L): Gear Type Shaft 8SBDD*-15-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
8SBD◇1(A)-15□-C	8SBD◇1(A)-15□-L	15	1ø110	60	4	30min.	90-1700	0.85	0.085	1.40	0.140	0.50	0.050	6.0 / 250
8SBD◇B-15□-C	8SBD◇B-15□-L	15	1ø100	50	4	30min.	90-1400	0.75	0.075	1.30	0.130	0.48	0.048	6.0 / 250
				60			90-1700	0.75	0.075	1.30	0.130	0.48	0.048	
8SBD◇C-15□-C	8SBD◇C-15□-L	15	1ø200	50	4	30min.	90-1400	0.75	0.075	1.30	0.130	0.48	0.048	1.5 / 450
				60			90-1700	0.75	0.075	1.30	0.130	0.48	0.048	
8SBD◇2(D)-15□-C	8SBD◇2(D)-15□-L	15	1ø220	60	4	30min.	90-1700	0.85	0.085	1.40	0.140	0.50	0.050	1.5 / 450
8SBD◇E-15□-C	8SBD◇E-15□-L	15	1ø220	50	4	30min.	90-1400	0.75	0.075	1.30	0.130	0.48	0.048	1.5 / 450
			1ø240					0.85	0.085	1.40	0.140	0.52	0.052	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gear box Model	r/min	V	Hz	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	200	250	300	360
8SBDG*-15G	8GBK□BMH	1200	110	60	kgfcm	3.4	4.1	5.7	6.8	8.5	10.2	11.3	14.2	17.0	20.4	20.4	25.6	30.7	36.8	40.9	46.2	55.4	69.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	0.33	0.40	0.56	0.67	0.83	1.00	1.11	1.39	1.67	2.00	2.00	2.50	3.00	3.61	4.01	4.53	5.43	6.79	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220	60	kgfcm	3.4	4.1	5.7	6.8	8.5	10.2	11.3	14.2	17.0	20.4	20.4	25.6	30.7	36.8	40.9	46.2	55.4	69.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	0.33	0.40	0.56	0.67	0.83	1.00	1.11	1.39	1.67	2.00	2.00	2.50	3.00	3.61	4.01	4.53	5.43	6.79	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220/240	50	kgfcm	3.4	4.1	5.7	6.8	8.5	10.2	11.3	14.2	17.0	20.4	20.4	25.6	30.7	36.8	40.9	46.2	55.4	69.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	0.33	0.40	0.56	0.67	0.83	1.00	1.11	1.39	1.67	2.00	2.00	2.50	3.00	3.61	4.01	4.53	5.43	6.79	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
		90	110	60	kgfcm	1.2	1.5	2.0	2.4	3.0	3.6	4.1	5.1	6.1	7.3	7.3	9.1	11.0	13.1	14.6	16.5	19.8	24.8	29.7	33.0	39.6	49.5	59.4	66.0	80.0	80.0	80.0
					N.m	0.12	0.14	0.20	0.24	0.30	0.36	0.40	0.50	0.60	0.71	0.72	0.89	1.07	1.29	1.43	1.62	1.94	2.43	2.91	3.23	3.88	4.85	5.82	6.47	7.84	7.84	7.84
			220	60	kgfcm	1.2	1.5	2.0	2.4	3.0	3.6	4.1	5.1	6.1	7.3	7.3	9.1	11.0	13.1	14.6	16.5	19.8	24.8	29.7	33.0	39.6	49.5	59.4	66.0	80.0	80.0	80.0
					N.m	0.12	0.14	0.20	0.24	0.30	0.36	0.40	0.50	0.60	0.71	0.72	0.89	1.07	1.29	1.43	1.62	1.94	2.43	2.91	3.23	3.88	4.85	5.82	6.47	7.84	7.84	7.84
			220/240	50	kgfcm	1.3	1.5	2.1	2.5	3.2	3.8	4.2	5.3	6.3	7.6	7.6	9.5	11.4	13.7	15.2	17.2	20.6	25.7	30.9	34.3	41.2	51.5	61.8	68.6	80.0	80.0	80.0
					N.m	0.12	0.15	0.21	0.25	0.31	0.37	0.41	0.52	0.62	0.74	0.74	0.93	1.12	1.34	1.49	1.68	2.02	2.52	3.03	3.36	4.04	5.05	6.05	6.73	7.84	7.84	7.84

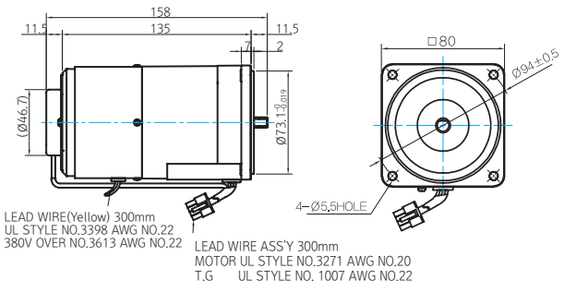
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
8SBDG*-15W	8WD□BL/□BR/□BRL	1200	110	60	kgfcm	11.5	13.4	16.2	18.6	24.5	27.7	32.3	42.0	46.2
					N.m	1.13	1.32	1.58	1.83	2.40	2.72	3.16	4.12	4.53
			220	60	kgfcm	11.6	13.9	17.4	20.9	29.1	34.9	41.8	58.1	69.7
					N.m	1.14	1.37	1.71	2.05	2.85	3.42	4.10	5.69	6.83
			220/240	50	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
		90	110	60	kgfcm	4.1	4.8	5.8	6.7	8.8	9.9	11.5	15.0	16.5
					N.m	0.40	0.47	0.57	0.65	0.86	0.97	1.13	1.47	1.62
			220	60	kgfcm	4.1	4.8	5.8	6.7	8.8	9.9	11.5	15.0	16.5
					N.m	0.40	0.47	0.57	0.65	0.86	0.97	1.13	1.47	1.62
			220/240	50	kgfcm	4.3	5.0	6.0	6.9	9.1	10.3	12.0	15.6	17.2
					N.m	0.42	0.49	0.59	0.68	0.89	1.01	1.17	1.53	1.68

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

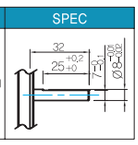
Dimensions

MOTOR ONLY

● MOTOR MODEL: 8SBD□□–15 (NO FAN)

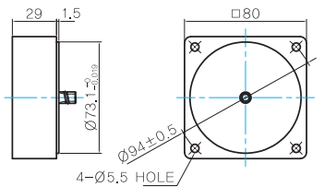


● MOTOR OUTPUT SHAFT

MODEL	SPEC
8SBDD□-15-□	

INTER-DECIMAL GEARBOX

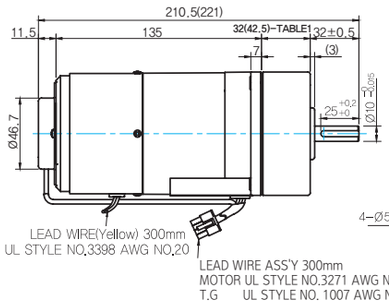
● MODEL: 8XD10□□



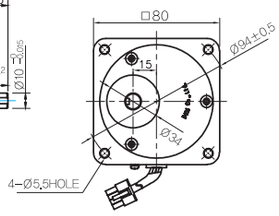
GEARED MOTOR

G TYPE GEARBOX

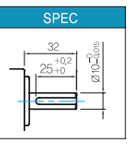
● MOTOR MODEL: 8SBDG□–15G (NO FAN)



● GEARBOX MODEL: 8GBK□BMH



● GEARBOX OUTPUT SHAFT

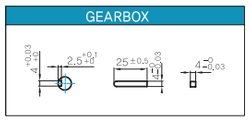
MODEL	SPEC
8GBK□BMH	

● 32(42.5)-Table1

SIZE(mm)	GEAR RATIO
32	8GBK3BMH – 8GBK18BMH
42.5	8GBK20BMH – 8GBK360BMH

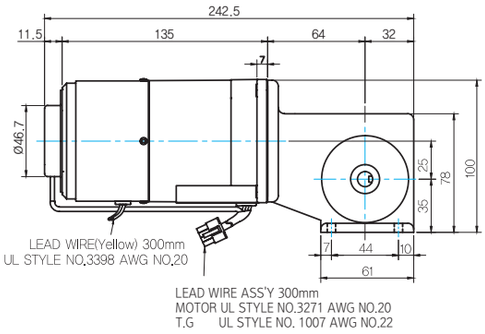
● KEY SPEC

GEARBOX

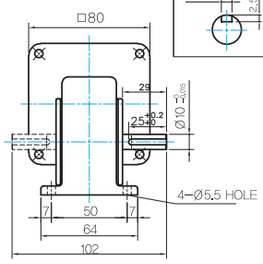


W TYPE GEARBOX

● MOTOR MODEL: 8SBDG□–15W (NO FAN)

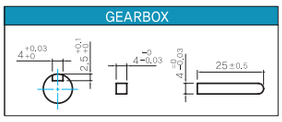


● GEARBOX MODEL: 8WD□BL/BR/BRL



● KEY SPEC

GEARBOX



WEIGHT

PART		WEIGHT(kg)
MOTOR		2.10
GEAR BOX	8GBK3BMH – 8GBK18BMH	0.56
	8GBK20BMH – 8GBK40BMH	0.65
	8GBK50BMH – 8GBK360BMH	0.72
	8WD□BL/BR/BRL	0.68
	8XD10○○	0.45

*The output flange and shaft are sold separately.

S.C. Brake Motor 15W (□80mm)

Motor Images

8SBDD□-15	8SBDG□-15G+8GBK□BMH	8SBDG□-15W+8WD□BL

25W Speed Control Brake Motor 25W(□ 80mm)

Motor Specification

Model 8SBDG*-25□-C(L): Gear Type Shaft 8SBDD*-25-C(L): D-Cut Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
8SBD◇1(A)-25□-C	8SBD◇1(A)-25□-L	25	1ø110	60	4	30min.	90-1700	1.80	0.180	2.30	0.230	0.60	0.060	10.0 / 250
8SBD◇B-25□-C	8SBD◇B-25□-L	25	1ø100	50	4	30min.	90-1400	1.70	0.170	2.20	0.220	0.58	0.058	10.0 / 250
				60			90-1700	1.70	0.170	2.20	0.220	0.58	0.058	
8SBD◇C-25□-C	8SBD◇C-25□-L	25	1ø200	50	4	30min.	90-1400	1.70	0.170	2.20	0.220	0.58	0.058	2.5 / 450
				60			90-1700	1.70	0.170	2.20	0.220	0.58	0.058	
8SBD◇2(D)-25□-C	8SBD◇2(D)-25□-L	25	1ø220	60	4	30min.	90-1700	1.80	0.180	2.30	0.230	0.60	0.060	2.5 / 450
8SBD◇E-25□-C	8SBD◇E-25□-L	25	1ø220	50	4	30min.	90-1400	1.60	0.160	2.10	0.210	0.55	0.055	2.5 / 450
			1ø240					1.80	0.180	2.30	0.230	0.65	0.065	

1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type). and D-Cut Type Shaft is for using the motor only. 3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached. 4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36
8SBDG*-25G	8GBK□BMH	1200	110	60	kgfcm	5.6	6.7	9.3	11.2	14.0	16.8	18.6	23.3	27.9	33.5	33.6	42.0	50.4	60.4
					N.m	0.55	0.66	0.91	1.10	1.37	1.64	1.83	2.28	2.74	3.29	3.29	4.11	4.94	5.92
			220	60	kgfcm	5.6	6.7	9.3	11.2	14.0	16.8	18.6	23.3	27.9	33.5	33.6	42.0	50.4	60.4
					N.m	0.55	0.66	0.91	1.10	1.37	1.64	1.83	2.28	2.74	3.29	3.29	4.11	4.94	5.92
			220/240	50	kgfcm	5.6	6.7	9.3	11.2	14.0	16.8	18.6	23.3	27.9	33.5	33.6	42.0	50.4	60.4
					N.m	0.55	0.66	0.91	1.10	1.37	1.64	1.83	2.28	2.74	3.29	3.29	4.11	4.94	5.92
		90	110	60	kgfcm	1.5	1.7	2.4	2.9	3.6	4.4	4.9	6.1	7.3	8.7	8.8	11.0	13.1	15.8
					N.m	0.14	0.17	0.24	0.29	0.36	0.43	0.48	0.60	0.71	0.86	0.86	1.07	1.29	1.55
			220	60	kgfcm	1.5	1.7	2.4	2.9	3.6	4.4	4.9	6.1	7.3	8.7	8.8	11.0	13.1	15.8
					N.m	0.14	0.17	0.24	0.29	0.36	0.43	0.48	0.60	0.71	0.86	0.86	1.07	1.29	1.55
			220/240	50	kgfcm	1.6	1.9	2.6	3.2	3.9	4.7	5.3	6.6	7.9	9.5	9.5	11.9	14.2	17.1
					N.m	0.15	0.19	0.26	0.31	0.39	0.46	0.52	0.64	0.77	0.93	0.93	1.16	1.40	1.67

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	40	50	60	75	90	100	120	150	180	200	250	300	360
8SBDG*-25G	8GBK□BMH	1200	110	60	kgfcm	67.2	75.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	6.58	7.44	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220	60	kgfcm	67.2	75.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	6.58	7.44	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220/240	50	kgfcm	67.2	75.9	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	6.58	7.44	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
		90	110	60	kgfcm	17.5	19.8	23.8	29.7	35.6	39.6	47.5	59.4	71.3	79.2	80.0	80.0	80.0
					N.m	1.72	1.94	2.33	2.91	3.49	3.88	4.66	5.82	6.99	7.76	7.84	7.84	7.84
			220	60	kgfcm	17.5	19.8	23.8	29.7	35.6	39.6	47.5	59.4	71.3	79.2	80.0	80.0	80.0
					N.m	1.72	1.94	2.33	2.91	3.49	3.88	4.66	5.82	6.99	7.76	7.84	7.84	7.84
			220/240	50	kgfcm	19.0	21.5	25.7	32.2	38.6	42.9	51.5	64.4	77.2	80.0	80.0	80.0	80.0
					N.m	1.86	2.10	2.52	3.15	3.78	4.20	5.05	6.31	7.57	7.84	7.84	7.84	7.84

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
8SBDG*-25W	8WD□BL/□BR/□BRL	1200	110	60	kgfcm	18.9	22.1	26.6	30.6	40.3	45.5	53.0	69.0	75.9
					N.m	1.85	2.16	2.60	3.00	3.94	4.46	5.19	6.76	7.44
			220	60	kgfcm	19.1	22.9	28.6	34.4	47.7	57.3	68.7	95.5	81.6
					N.m	1.87	2.24	2.81	3.37	4.68	5.61	6.73	9.35	8.00
			220/240	50	kgfcm	18.9	22.1	26.6	30.6	40.3	45.5	53.0	69.0	75.9
					N.m	1.85	2.16	2.60	3.00	3.94	4.46	5.19	6.76	7.44
		90	110	60	kgfcm	4.9	5.8	6.9	8.0	10.5	11.9	13.8	18.0	19.8
					N.m	0.48	0.56	0.68	0.78	1.03	1.16	1.35	1.76	1.94
			220	60	kgfcm	4.9	5.8	6.9	8.0	10.5	11.9	13.8	18.0	19.8
					N.m	0.48	0.56	0.68	0.78	1.03	1.16	1.35	1.76	1.94
			220/240	50	kgfcm	5.3	6.2	7.5	8.7	11.4	12.9	15.0	19.5	21.5
					N.m	0.52	0.61	0.74	0.85	1.11	1.26	1.47	1.91	2.10

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

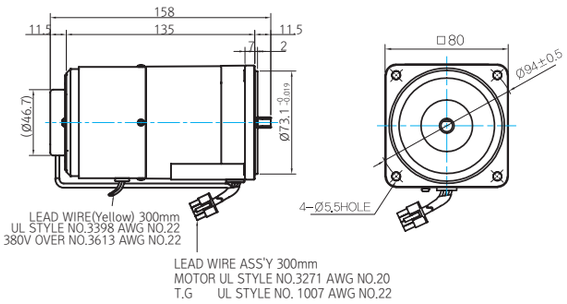
B AC Motors

S.C. Brake Motor 25W (□80mm)

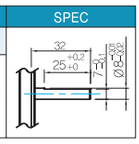
Dimensions

MOTOR ONLY

● MOTOR MODEL: 8SBD□□-25 (NO FAN)

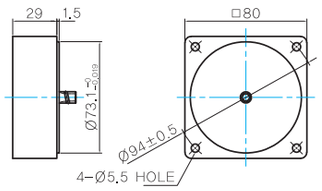


● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
8SBDD□-25-□	

INTER-DECIMAL GEARBOX

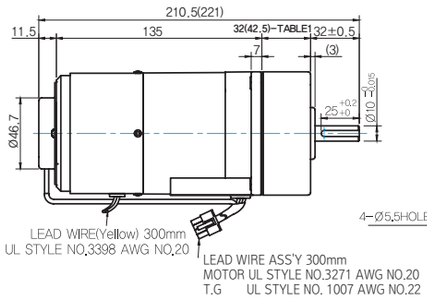
● MODEL: 8XD10□□



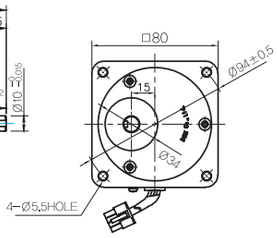
GEARED MOTOR

G TYPE GEARBOX

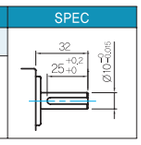
● MOTOR MODEL: 8SBDG□-25G (NO FAN)



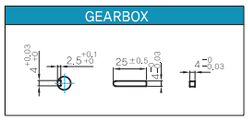
● GEARBOX MODEL: 8GBK□BMH



● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
8GBK□BMH	

● KEY SPEC

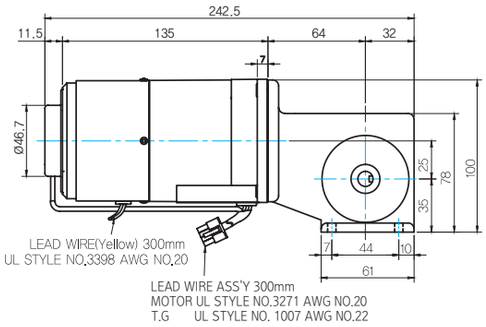


● 32(42.5)-Table1

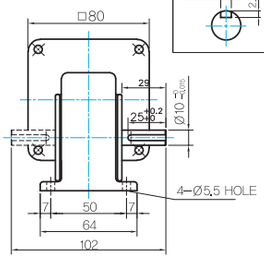
SIZE(mm)	GEAR RATIO
32	8GBK3BMH – 8GBK18BMH
42.5	8GBK20BMH – 8GBK360BMH

W TYPE GEARBOX

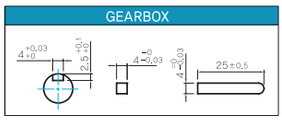
● MOTOR MODEL: 8SBDG□-25W (NO FAN)



● GEARBOX MODEL: 8WD□BL/BR/BRL



● KEY SPEC



WEIGHT

PART		WEIGHT(kg)
MOTOR		2.10
GEAR BOX	8GBK3BMH – 8GBK18BMH	0.56
	8GBK20BMH – 8GBK40BMH	0.65
	8GBK50BMH – 8GBK360BMH	0.72
	8WD□BL/BR/BRL	0.68
	8XD10○○	0.45

*The output flange and shaft are sold separately.

Motor Images

8SBDD□-25	8SBDG□-25G+8GBK□BMH	8SBDG□-25W+8WD□BL

S.C. Brake Motor 40W (□90mm)

40W Speed Control Brake Motor 40W(□90mm)

Motor Specification

Model 9SBDG*-40□-C(L): Gear Type Shaft 9SBDD*-40-C(L): D-Cut Type Shaft 9SBDK*-40-C(L): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9SBD◇1(A)-40□-C	9SBD◇1(A)-40□-L	40	1ø110	60	4	30min.	90-1700	3.40	0.340	3.00	0.300	0.85	0.085	16.0 / 250
9SBD◇B-40□-C	9SBD◇B-40□-L	40	1ø100	50	4	30min.	90-1400	3.20	0.320	2.90	0.290	0.85	0.085	16.0 / 250
				60			90-1700	3.10	0.310	2.90	0.290	0.85	0.085	
9SBD◇C-40□-C	9SBD◇C-40□-L	40	1ø200	50	4	30min.	90-1400	3.20	0.320	2.90	0.290	0.85	0.085	4.0 / 450
				60			90-1700	3.10	0.310	2.90	0.290	0.85	0.085	
9SBD◇2(D)-40□-C	9SBD◇2(D)-40□-L	40	1ø220	60	4	30min.	90-1700	3.30	0.330	3.00	0.300	0.85	0.085	4.0 / 450
9SBD◇E-40□-C	9SBD◇E-40□-L	40	1ø220	50	4	30min.	90-1400	3.00	0.300	2.60	0.260	0.80	0.080	4.0 / 450
			1ø240					3.30	0.330	3.20	0.320	0.90	0.090	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	2	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
9SBDG*-40G	9GBK□BMH	1200	110	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	30.4	36.5	43.7	43.8	54.8	65.7	78.8	87.6	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.98	3.57	4.29	4.29	5.37	6.44	7.73	8.58	9.70	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
			220	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	30.4	36.5	43.7	43.8	54.8	65.7	78.8	87.6	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.98	3.57	4.29	4.29	5.37	6.44	7.73	8.58	9.70	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
			220/240	50	kgfcm	4.2	6.3	7.6	10.5	12.6	15.8	19.0	21.1	26.3	31.6	37.9	38.0	47.5	56.9	68.3	75.9	85.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					N.m	0.41	0.62	0.74	1.03	1.24	1.55	1.86	2.06	2.58	3.10	3.71	3.72	4.65	5.58	6.70	7.44	8.41	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
		90	110	60	kgfcm	1.4	2.1	2.5	3.4	4.1	5.2	6.2	6.9	8.6	10.3	12.4	12.4	15.5	18.6	22.3	24.8	28.1	33.7	42.1	50.5	56.1	67.3	84.2	100.0	100.0
					N.m	0.13	0.20	0.24	0.34	0.40	0.51	0.61	0.67	0.84	1.01	1.21	1.22	1.52	1.82	2.19	2.43	2.75	3.30	4.12	4.95	5.50	6.60	8.25	9.80	9.80
			220	60	kgfcm	1.4	2.1	2.5	3.4	4.1	5.2	6.2	6.9	8.6	10.3	12.4	12.4	15.5	18.6	22.3	24.8	28.1	33.7	42.1	50.5	56.1	67.3	84.2	100.0	100.0
					N.m	0.13	0.20	0.24	0.34	0.40	0.51	0.61	0.67	0.84	1.01	1.21	1.22	1.52	1.82	2.19	2.43	2.75	3.30	4.12	4.95	5.50	6.60	8.25	9.80	9.80
			220/240	50	kgfcm	1.3	1.9	2.3	3.2	3.9	4.9	5.8	6.5	8.1	9.7	11.7	11.7	14.6	17.5	21.0	23.4	26.4	31.7	39.6	47.5	52.8	63.4	79.2	95.0	100.0
					N.m	0.13	0.19	0.23	0.32	0.38	0.48	0.57	0.64	0.79	0.95	1.14	1.14	1.43	1.72	2.06	2.29	2.59	3.10	3.88	4.66	5.17	6.21	7.76	9.31	9.80

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SBDG*-40W	9WD□BL/□BR/□BRL	1200	110	60	kgfcm	24.6	28.8	34.7	40.0	52.5	59.4	69.1	90.0	99.0
					N.m	2.41	2.82	3.40	3.92	5.15	5.82	6.77	8.82	9.70
			220	60	kgfcm	24.9	29.9	37.4	44.8	62.3	74.7	89.6	124.5	122.4
					N.m	2.44	2.93	3.66	4.39	6.10	7.32	8.78	12.20	12.00
			220/240	50	kgfcm	26.2	30.7	37.0	42.6	56.0	63.4	73.7	96.0	105.6
					N.m	2.57	3.01	3.62	4.18	5.49	6.21	7.23	9.41	10.35
		90	110	60	kgfcm	7.0	8.2	9.8	11.3	14.9	16.8	19.6	25.5	28.1
					N.m	0.68	0.80	0.96	1.11	1.46	1.65	1.92	2.50	2.75
			220	60	kgfcm	7.0	8.2	9.8	11.3	14.9	16.8	19.6	25.5	28.1
					N.m	0.68	0.80	0.96	1.11	1.46	1.65	1.92	2.50	2.75
			220/240	50	kgfcm	7.4	8.6	10.4	12.0	15.8	17.8	20.7	27.0	29.7
					N.m	0.72	0.85	1.02	1.17	1.54	1.75	2.03	2.65	2.91

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

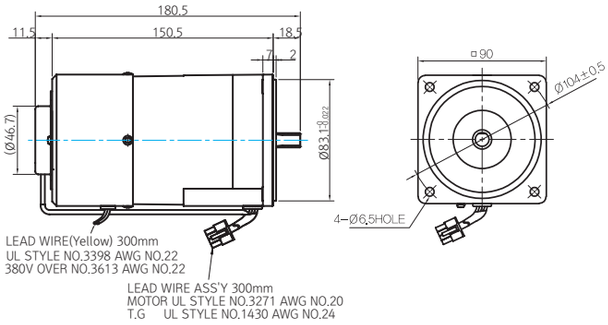
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30
9SBDG*-40P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5	59.4
					N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85	5.82
			220	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5	59.4
					N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85	5.82
			220/240	50	kgfcm	4.2	6.3	7.6	10.5	12.6	15.8	19.0	21.1	23.7	28.5	34.2	38.0	42.9	51.5
					N.m	0.41	0.62	0.74	1.03	1.24	1.55	1.86	2.06	2.33	2.79	3.35	3.72	4.20	5.05
		90	110	60	kgfcm	1.4	2.1	2.5	3.4	4.1	5.2	6.2	6.9	7.8	9.3	11.2	12.4	14.0	16.8
					N.m	0.13	0.20	0.24	0.34	0.40	0.51	0.61	0.67	0.76	0.91	1.09	1.22	1.37	1.65
			220	60	kgfcm	1.4	2.1	2.5	3.4	4.1	5.2	6.2	6.9	7.8	9.3	11.2	12.4	14.0	16.8
					N.m	0.13	0.20	0.24	0.34	0.40	0.51	0.61	0.67	0.76	0.91	1.09	1.22	1.37	1.65
			220/240	50	kgfcm	1.3	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.3	8.8	10.5	11.7	13.2	15.8
					N.m	0.13	0.19	0.23	0.32	0.38	0.48	0.57	0.64	0.72	0.86	1.03	1.14	1.29	1.55

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	36	40	50	60	75	90	100	120	150	180	200
9SBDG*-40P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	71.3	79.2	99.0	118.8	132.8	159.3	177.0	200.0	200.0	200.0	200.0
					N.m	6.99	7.76	9.70	11.64	13.01	15.61	17.35	19.60	19.60	19.60	19.60
			220	60	kgfcm	71.3	79.2	99.0	118.8	132.8	159.3	177.0	200.0	200.0	200.0	200.0
					N.m	6.99	7.76	9.70	11.64	13.01	15.61	17.35	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	61.8	68.6	85.8	103.0	115.1	138.1	153.4	184.1	200.0	200.0	200.0
					N.m	6.05	6.73	8.41	10.09	11.27	13.53	15.03	18.04	19.60	19.60	19.60
		90	110	60	kgfcm	20.2	22.4	28.1	33.7	37.6	45.1	50.2	60.2	75.2	90.3	100.3
					N.m	1.98	2.20	2.75	3.30	3.69	4.42	4.91	5.90	7.37	8.85	9.83
			220	60	kgfcm	20.2	22.4	28.1	33.7	37.6	45.1	50.2	60.2	75.2	90.3	100.3
					N.m	1.98	2.20	2.75	3.30	3.69	4.42	4.91	5.90	7.37	8.85	9.83
			220/240	50	kgfcm	19.0	21.1	26.4	31.7	35.4	42.5	47.2	56.6	70.8	85.0	94.4
					N.m	1.86	2.07	2.59	3.10	3.47	4.16	4.63	5.55	6.94	8.33	9.25

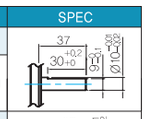
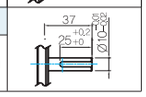
Dimensions

MOTOR ONLY

- MOTOR MODEL: 9SBD□□-40 (NO FAN)

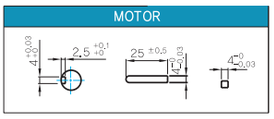


- MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
9SBDD□-40-□	
KEY TYPE	
9SBDK□-40-□	

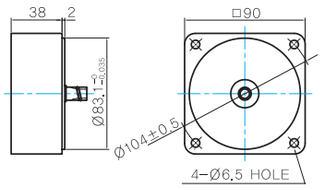
- KEY SPEC

MOTOR



INTER-DECIMAL GEARBOX

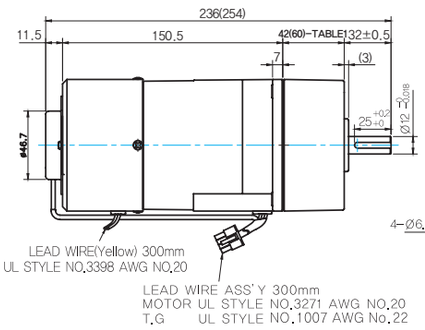
- MODEL: 9XD10□□



GEARED MOTOR

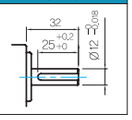
G TYPE GEARBOX

- MOTOR MODEL: 9SBDG□-40G (NO FAN)



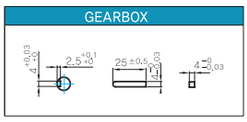
- GEARBOX MODEL: 9GBK□BMH

- GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9GBK□BMH	

- KEY SPEC

GEARBOX



- 42(60)-Table1

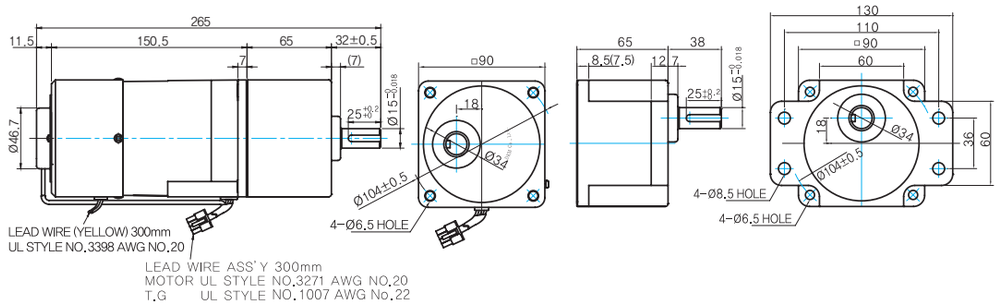
SIZE(mm)	GEAR RATIO
42	9GBK2BMH – 9GBK18BMH
60	9GBK20BMH – 9GBK200BMH

B AC Motors

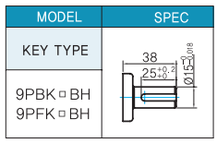
S.C. Brake Motor 40W (□ 90mm)

P TYPE GEARBOX

- MOTOR MODEL: 9SBDG□-40P (NO FAN)
- GEARBOX MODEL: 9PBK□BH
- GEARBOX MODEL: 9PFK□BH

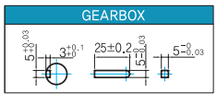


- GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

- KEY SPEC

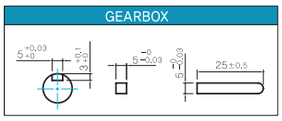
GEARBOX

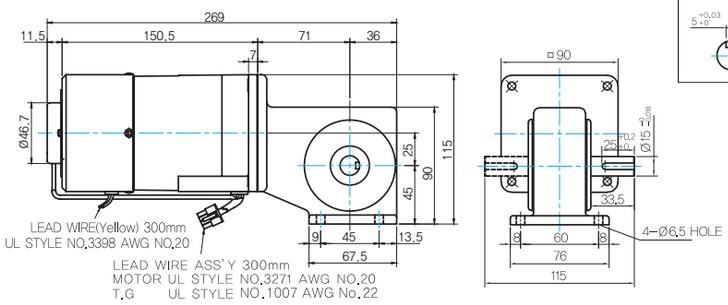


W TYPE GEARBOX

- MOTOR MODEL: 9SBDG□-40W (NO FAN)
- GEARBOX MODEL: 9WD□BL/BR/BRL
- KEY SPEC

GEARBOX





WEIGHT

PART		WEIGHT(kg)
MOTOR		3.10
GEAR BOX	9GBK2BMH - 9GBK18BMH	0.78
	9GBK20BMH - 9GBK40BMH	1.10
	9GBK50BMH - 9GBK200BMH	1.20
	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9WD□BL/BR/BRL	1.00
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9SBDD□-40	9SBDG□-40G+9GBK□BMH	9SRDG□-40P+9PBK□BM	9SBDG□-40W+9WD□BL

60W Speed Control Brake Motor 60W(□90mm)

Motor Specification

Model 9SBDG*-60F2□-C(L): Gear Type Shaft 9SBDD*-60F2-C(L): D-Cut Type Shaft 9SBDK*-60F2-C(L): Key Type Shaft Connector Type	Lead Wire Type	Output W	Voltage V	Frequency Hz	Poles	Duty	Speed Range r/min	Starting Torque kgfcm	Starting Torque N.m	Permissible Torque 1200r/min kgfcm	Permissible Torque 1200r/min N.m	Permissible Torque 90r/min kgfcm	Permissible Torque 90r/min N.m	Capacitor μF / VAC
9SBD◇1(A)-60F2□-C	9SBD◇1(A)-60F2□-L	60	1ø110	60	4	30min.	90-1700	5.00	0.500	5.40	0.540	2.80	0.280	20.0 / 250
9SRD◇B-60F2□-C	9SRD◇B-60F2□-L	60	1ø100	50	4	30min.	90-1400	5.20	0.520	5.50	0.550	2.80	0.280	25.0 / 250
				60			90-1700	5.00	0.500	5.40	0.540	2.80	0.280	
9SRD◇C-60F2□-C	9SRD◇C-60F2□-L	60	1ø200	50	4	30min.	90-1400	5.00	0.500	5.20	0.520	2.70	0.270	6.0 / 450
				60			90-1700	4.90	0.490	5.20	0.520	2.70	0.270	
9SBD◇2(D)-60F2□-C	9SBD◇2(D)-60F2□-L	60	1ø220	60	4	30min.	90-1700	5.00	0.500	5.30	0.530	2.70	0.270	6.0 / 450
9SBD◇E-60F2□-C	9SBD◇E-60F2□-L	60	1ø220	50	4	30min.	90-1400	5.00	0.500	5.20	0.520	2.70	0.270	6.0 / 450
			1ø240					5.50	0.550	5.80	0.580	2.90	0.290	

Max. Permissible Torque at Output Shaft of Gearbox

1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only. 3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached. 4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
9SBDG*-60F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	8.7	13.1	15.7	21.9	26.2	32.8	39.4	43.7	49.3	59.1	71.0	78.8	89.1
					N.m	0.86	1.29	1.54	2.14	2.57	3.21	3.86	4.29	4.83	5.79	6.95	7.73	8.73
			220	60	kgfcm	8.6	12.9	15.5	21.5	25.8	32.2	38.6	42.9	48.4	58.0	69.6	77.4	87.5
					N.m	0.84	1.26	1.51	2.10	2.52	3.16	3.79	4.21	4.74	5.69	6.82	7.58	8.57
			220/240	50	kgfcm	8.4	12.6	15.2	21.1	25.3	31.6	37.9	42.1	47.5	56.9	68.3	75.9	85.8
					N.m	0.83	1.24	1.49	2.06	2.48	3.10	3.71	4.13	4.65	5.58	6.70	7.44	8.41
		90	110	60	kgfcm	4.5	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2
					N.m	0.44	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53
			220	60	kgfcm	4.4	6.6	7.9	10.9	13.1	16.4	19.7	21.9	24.6	29.6	35.5	39.4	44.6
					N.m	0.43	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.41	2.90	3.48	3.86	4.37
			220/240	50	kgfcm	4.4	6.6	7.9	10.9	13.1	16.4	19.7	21.9	24.6	29.6	35.5	39.4	44.6
					N.m	0.43	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.41	2.90	3.48	3.86	4.37

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200
9SBDG*-60F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	106.9	128.3	142.6	178.2	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	10.48	12.57	13.97	17.46	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	104.9	125.9	139.9	174.9	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	10.28	12.34	13.71	17.14	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	103.0	123.6	137.3	171.6	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	10.09	12.11	13.45	16.82	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
		90	110	60	kgfcm	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	200.0	200.0	200.0
					N.m	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	19.60	19.60	19.60
			220	60	kgfcm	53.5	64.2	71.3	89.1	106.9	119.5	143.4	159.3	191.2	200.0	200.0	200.0
					N.m	5.24	6.29	6.99	8.73	10.48	11.71	14.05	15.61	18.73	19.60	19.60	19.60
			220/240	50	kgfcm	53.5	64.2	71.3	89.1	106.9	119.5	143.4	159.3	191.2	200.0	200.0	200.0
					N.m	5.24	6.29	6.99	8.73	10.48	11.71	14.05	15.61	18.73	19.60	19.60	19.60

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30
9SBDG*-60F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	13.1	15.7	21.9	26.2	32.8	39.4	43.7	49.3	59.1	71.0	78.8	89.1	106.9
					N.m	1.29	1.54	2.14	2.57	3.21	3.86	4.29	4.83	5.79	6.95	7.73	8.73	10.48
			220	60	kgfcm	12.9	15.5	21.5	25.8	32.2	38.6	42.9	48.4	58.0	69.6	77.4	87.5	104.9
					N.m	1.26	1.51	2.10	2.52	3.16	3.79	4.21	4.74	5.69	6.82	7.58	8.57	10.28
			220/240	50	kgfcm	12.6	15.2	21.1	25.3	31.6	37.9	42.1	47.5	56.9	68.3	75.9	85.8	103.0
					N.m	1.24	1.49	2.06	2.48	3.10	3.71	4.13	4.65	5.58	6.70	7.44	8.41	10.09
		90	110	60	kgfcm	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2	55.4
					N.m	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53	5.43
			220	60	kgfcm	6.6	7.9	10.9	13.1	16.4	19.7	21.9	24.6	29.6	35.5	39.4	44.6	53.5
					N.m	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.41	2.90	3.48	3.86	4.37	5.24
			220/240	50	kgfcm	6.6	7.9	10.9	13.1	16.4	19.7	21.9	24.6	29.6	35.5	39.4	44.6	53.5
					N.m	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.41	2.90	3.48	3.86	4.37	5.24

S.C. Brake Motor 60W (□90mm)

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	36	40	50	60	75	90	100	120	150	180	200
9SBDG*-60F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	128.3	142.6	178.2	213.8	239.0	286.7	300.0	300.0	300.0	300.0	300.0
					N.m	12.57	13.97	17.46	20.96	23.42	28.10	29.40	29.40	29.40	29.40	29.40
			220	60	kgfcm	125.9	139.9	174.9	209.9	234.5	281.4	300.0	300.0	300.0	300.0	300.0
					N.m	12.34	13.71	17.14	20.57	22.98	27.58	29.40	29.40	29.40	29.40	29.40
			220/240	50	kgfcm	123.6	137.3	171.6	205.9	230.1	276.1	300.0	300.0	300.0	300.0	300.0
					N.m	12.11	13.45	16.82	20.18	22.55	27.06	29.40	29.40	29.40	29.40	29.40
		90	110	60	kgfcm	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	247.8	297.4	300.0
					N.m	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	24.28	29.14	29.40
			220	60	kgfcm	64.2	71.3	89.1	106.9	119.5	143.4	159.3	191.2	239.0	286.7	300.0
					N.m	6.29	6.99	8.73	10.48	11.71	14.05	15.61	18.73	23.42	28.10	29.40
			220/240	50	kgfcm	64.2	71.3	89.1	106.9	119.5	143.4	159.3	191.2	239.0	286.7	300.0
					N.m	6.29	6.99	8.73	10.48	11.71	14.05	15.61	18.73	23.42	28.10	29.40

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SBDG*-60F2W	9WD□BL/□BR/□BRL	1200	110	60	kgfcm	44.3	51.8	62.4	71.9	94.5	106.9	124.4	142.9	122.4
					N.m	4.34	5.08	6.11	7.05	9.26	10.48	12.19	14.00	12.00
			220	60	kgfcm	43.5	50.9	61.2	70.6	92.8	104.9	122.1	142.9	122.4
					N.m	4.26	4.99	6.00	6.92	9.09	10.28	11.97	14.00	12.00
			220/240	50	kgfcm	47.6	55.7	67.0	77.3	101.5	114.8	133.6	142.9	122.4
					N.m	4.66	5.46	6.57	7.57	9.95	11.25	13.10	14.00	12.00
		90	110	60	kgfcm	23.0	26.9	32.3	37.3	49.0	55.4	64.5	84.0	92.4
					N.m	2.25	2.63	3.17	3.66	4.80	5.43	6.32	8.23	9.06
			220	60	kgfcm	22.1	25.9	31.2	36.0	47.3	53.5	62.2	81.0	89.1
					N.m	2.17	2.54	3.06	3.52	4.63	5.24	6.10	7.94	8.73
			220/240	50	kgfcm	23.8	27.8	33.5	38.6	50.8	57.4	66.8	87.0	95.7
					N.m	2.33	2.73	3.28	3.79	4.97	5.63	6.55	8.53	9.38

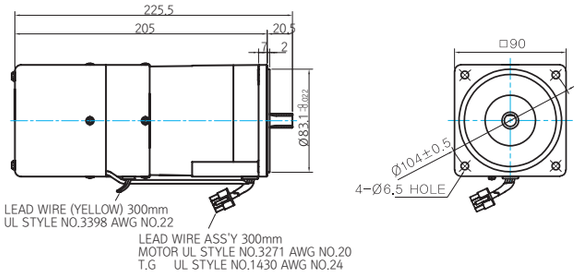
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	5	7.5	10	15	20	25	30	40	50	60	80
9SBDG*-60F2WH	9WHD□-030	1200	110	60	kgfcm	18.8	27.2	35.0	49.2	62.2	71.3	82.9	102.0	116.6	129.6	132.7
					N.m	1.84	2.67	3.43	4.83	6.10	6.99	8.13	9.99	11.43	12.70	13.00
			220	60	kgfcm	18.4	26.7	34.3	48.3	61.1	70.0	81.4	100.1	114.5	127.2	132.7
					N.m	1.81	2.62	3.37	4.74	5.98	6.86	7.98	9.81	11.22	12.47	13.00
			220/240	50	kgfcm	20.2	29.2	37.6	52.9	66.8	76.6	89.1	109.5	125.3	139.2	132.7
					N.m	1.98	2.86	3.68	5.18	6.55	7.50	8.73	10.73	12.28	13.64	13.00
		90	110	60	kgfcm	12.2	17.6	22.7	31.9	40.3	46.2	53.8	66.1	75.6	84.0	98.6
					N.m	1.19	1.73	2.22	3.13	3.95	4.53	5.27	6.48	7.41	8.23	9.66
			220	60	kgfcm	11.7	17.0	21.9	30.8	38.9	44.6	51.8	63.7	72.9	81.0	95.0
					N.m	1.15	1.67	2.14	3.02	3.81	4.37	5.08	6.24	7.14	7.94	9.31
			220/240	50	kgfcm	12.6	18.3	23.5	33.1	41.8	47.9	55.7	68.4	78.3	87.0	102.1
					N.m	1.24	1.79	2.30	3.24	4.09	4.69	5.46	6.71	7.67	8.53	10.00

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

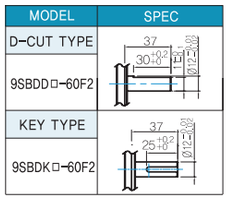
Dimensions

MOTOR ONLY

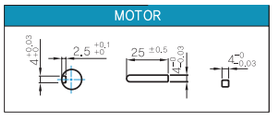
● MOTOR MODEL:
9SBD□□-60F2 (POWERFUL FAN)



● MOTOR OUTPUT SHAFT

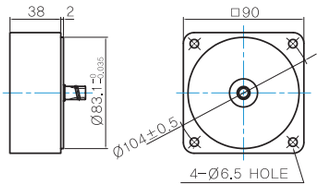
MODEL	SPEC
D-CUT TYPE	
9SBDD□-60F2	
KEY TYPE	
9SBDK□-60F2	

● KEY SPEC

MOTOR


INTER-DECIMAL GEARBOX

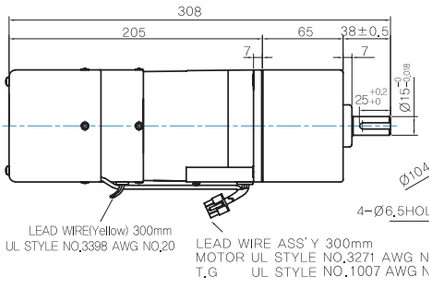
● MODEL: 9XD10□□



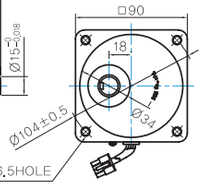
GEARED MOTOR

P TYPE GEARBOX

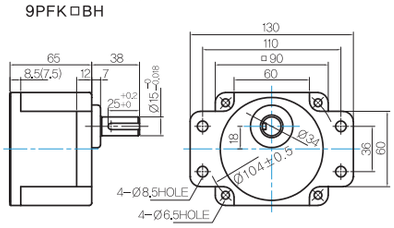
● MOTOR MODEL:
9SBDG□-60F2P (POWERFUL FAN)



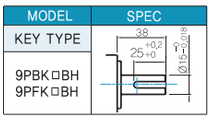
● GEARBOX MODEL:
9PBK□BH



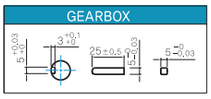
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

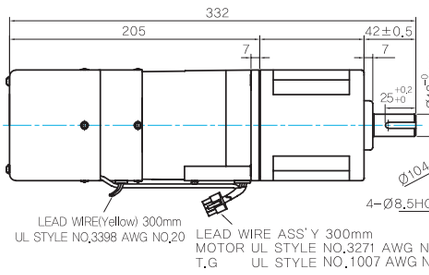
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

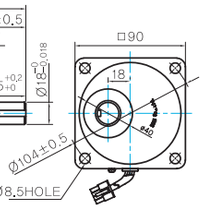
GEARBOX


H TYPE GEARBOX

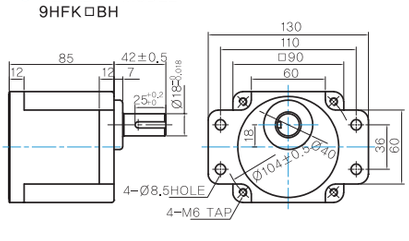
● MOTOR MODEL:
9SBDG□-60F2H (POWERFUL FAN)



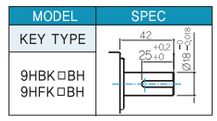
● GEARBOX MODEL:
9HBK□BH



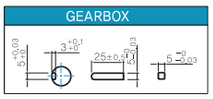
● GEARBOX MODEL:
9HFK□BH



● GEARBOX OUTPUT SHAFT

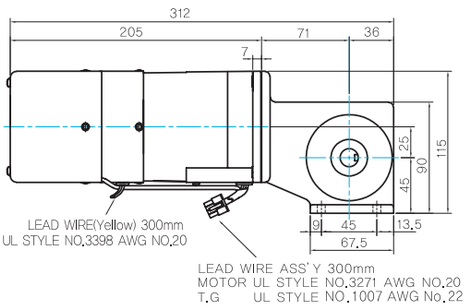
MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC

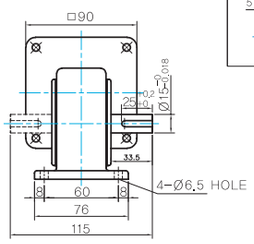
GEARBOX


W TYPE GEARBOX

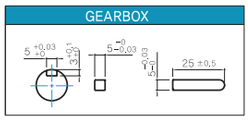
● MOTOR MODEL:
9SBDG□-60F2W (POWERFUL FAN)



● GEARBOX MODEL:
9WD□BL/BR/BRL



● KEY SPEC

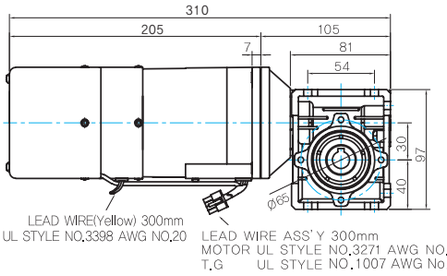
GEARBOX


B AC Motors

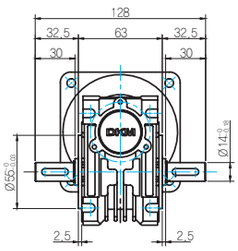
S.C. Brake Motor 60W (□90mm)

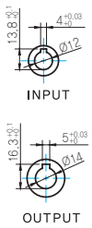
WH TYPE GEARBOX

● MOTOR MODEL:
9SBDG□-60F2WH (POWERFUL FAN)

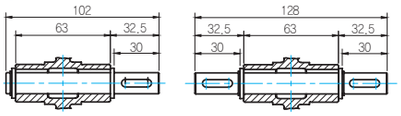


● GEARBOX MODEL:
9WHD□-030



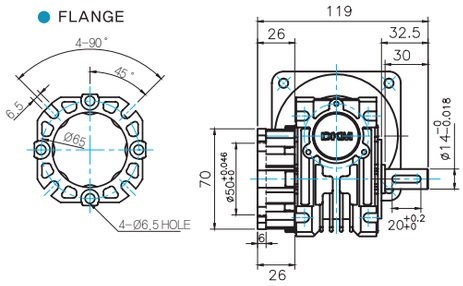


● SHAFT

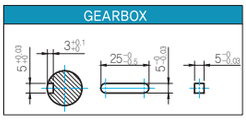


Unidirectional Bi-directional

● FLANGE



● KEY SPEC

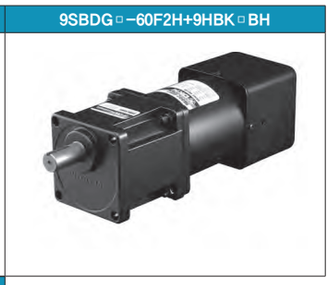


WEIGHT

PART		WEIGHT(kg)
MOTOR		3.40
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WD□BL/BR/BRL	1.00
	9WHD□-030	1.20
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9SBDD□-60F2	9SBDG□-60F2P+9PBK□BH	9SBDG□-60F2P+9PFK□BH	9SBDG□-60F2H+9HBK□BH
			

9SBDG□-60F2H+9HFK□BH	9SBDG□-60F2W+9WD□BL	9SBDG□-60F2WH+9WHD□-030

90W Speed Control Brake Motor 90W(□90mm)

Motor Specification

Model 9SBDG*-90F2□-C(L): Gear Type Shaft 9SBDD*-90F2-C(L): D-Cut Type Shaft 9SBDK*-60F2-C(L): Key Type Shaft Connector Type	Lead Wire Type	Output W	Voltage V	Frequency Hz	Poles	Duty	Speed Range r/min	Starting Torque kgfcm	Starting Torque N.m	Permissible Torque 1200r/min kgfcm	Permissible Torque 1200r/min N.m	Permissible Torque 90r/min kgfcm	Permissible Torque 90r/min N.m	Capacitor μF / VAC
9SBD◇1(A)-90F2□-C	9SBD◇1(A)-90F2□-L	90	1ø110	60	4	30min.	90-1700	6.00	0.600	7.30	0.730	3.00	0.300	25.0 / 250
9SBD◇B-90F2□-C	9SBD◇B-90F2□-L	90	1ø100	50	4	30min.	90-1400	6.30	0.630	7.60	0.760	3.30	0.330	30.0 / 250
				60			90-1700	6.20	0.620	7.40	0.740	3.30	0.330	
9SBD◇C-90F2□-C	9SBD◇C-90F2□-L	90	1ø200	50	4	30min.	90-1400	6.00	0.600	7.50	0.750	3.00	0.300	7.0 / 450
				60			90-1700	6.00	0.600	7.30	0.730	3.00	0.300	
9SBD◇2(D)-90F2□-C	9SBD◇2(D)-90F2□-L	90	1ø220	60	4	30min.	90-1700	6.00	0.600	7.30	0.730	3.00	0.300	6.5 / 450
9SBD◇E-90F2□-C	9SBD◇E-90F2□-L	90	1ø220	50	4	30min.	90-1400	5.50	0.550	7.00	0.700	2.80	0.280	6.5 / 450
			1ø240					6.00	0.600	7.50	0.750	3.30	0.330	

Max. Permissible Torque at Output Shaft of Gearbox

1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type), and D-Cut Type Shaft / Key Type Shaft are for using the motor only. 3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached. 4) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20
9SBDG*-90F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	11.8	17.7	21.3	29.6	35.5	44.3	53.2	59.1	66.6	79.9	95.9	106.6
					N.m	1.16	1.74	2.09	2.90	3.48	4.35	5.22	5.79	6.53	7.83	9.40	10.44
			220	60	kgfcm	11.8	17.7	21.3	29.6	35.5	44.3	53.2	59.1	66.6	79.9	95.9	106.6
					N.m	1.16	1.74	2.09	2.90	3.48	4.35	5.22	5.79	6.53	7.83	9.40	10.44
			220/240	50	kgfcm	11.3	17.0	20.4	28.4	34.0	42.5	51.0	56.7	63.9	76.7	92.0	102.2
					N.m	1.11	1.67	2.00	2.78	3.33	4.17	5.00	5.56	6.26	7.51	9.01	10.02
		90	110	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8
					N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29
			220	60	kgfcm	4.9	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8
					N.m	0.48	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29
			220/240	50	kgfcm	4.5	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9
					N.m	0.44	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	25	30	36	40	50	60	75	90	100	120	150	180	200
9SBDG*-90F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	120.5	144.5	173.4	192.7	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	11.80	14.16	17.00	18.89	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	120.5	144.5	173.4	192.7	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	11.80	14.16	17.00	18.89	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	115.5	138.6	166.3	184.8	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	11.32	13.58	16.30	18.11	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
		90	110	60	kgfcm	49.5	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	200.0	200.0	200.0	200.0
					N.m	4.85	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	19.60	19.60	19.60	19.60
			220	60	kgfcm	49.5	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	200.0	200.0	200.0	200.0
					N.m	4.85	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	46.2	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	200.0	200.0	200.0
					N.m	4.53	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	19.60	19.60	19.60

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30
9SBDG*-90F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	17.7	21.3	29.6	35.5	44.3	53.2	59.1	66.6	79.9	95.9	106.6	120.5	144.5
					N.m	1.74	2.09	2.90	3.48	4.35	5.22	5.79	6.53	7.83	9.40	10.44	11.80	14.16
			220	60	kgfcm	17.7	21.3	29.6	35.5	44.3	53.2	59.1	66.6	79.9	95.9	106.6	120.5	144.5
					N.m	1.74	2.09	2.90	3.48	4.35	5.22	5.79	6.53	7.83	9.40	10.44	11.80	14.16
			220/240	50	kgfcm	17.0	20.4	28.4	34.0	42.5	51.0	56.7	63.9	76.7	92.0	102.2	115.5	138.6
					N.m	1.67	2.00	2.78	3.33	4.17	5.00	5.56	6.26	7.51	9.01	10.02	11.32	13.58
		90	110	60	kgfcm	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5	59.4
					N.m	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85	5.82
			220	60	kgfcm	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5	59.4
					N.m	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85	5.82
			220/240	50	kgfcm	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2	55.4
					N.m	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53	5.43

S.C. Brake Motor 90W (□90mm)

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	36	40	50	60	75	90	100	120	150	180	200
9SBDG*-90F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	173.4	192.7	240.9	289.1	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	17.00	18.89	23.61	28.33	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220	60	kgfcm	173.4	192.7	240.9	289.1	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	17.00	18.89	23.61	28.33	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220/240	50	kgfcm	166.3	184.8	231.0	277.2	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	16.30	18.11	22.64	27.17	29.40	29.40	29.40	29.40	29.40	29.40	29.40
		90	110	60	kgfcm	71.3	79.2	99.0	118.8	132.8	159.3	177.0	212.4	265.5	300.0	300.0
					N.m	6.99	7.76	9.70	11.64	13.01	15.61	17.35	20.82	26.02	29.40	29.40
			220	60	kgfcm	71.3	79.2	99.0	118.8	132.8	159.3	177.0	212.4	265.5	300.0	300.0
					N.m	6.99	7.76	9.70	11.64	13.01	15.61	17.35	20.82	26.02	29.40	29.40
			220/240	50	kgfcm	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	247.8	297.4	300.0
					N.m	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	24.28	29.14	29.40

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SBDG*-90F2W	9WD□BL/□BR/□BRL	1200	110	60	kgfcm	59.9	70.1	84.3	97.2	127.8	144.5	153.1	142.9	122.4
					N.m	5.87	6.87	8.26	9.53	12.52	14.16	15.00	14.00	12.00
			220	60	kgfcm	59.9	70.1	84.3	97.2	127.8	144.5	153.1	142.9	122.4
					N.m	5.87	6.87	8.26	9.53	12.52	14.16	15.00	14.00	12.00
			220/240	50	kgfcm	61.5	72.0	86.6	99.9	131.3	148.5	153.1	142.9	122.4
					N.m	6.03	7.06	8.49	9.79	12.86	14.55	15.00	14.00	12.00
		90	110	60	kgfcm	24.6	28.8	34.7	40.0	52.5	59.4	69.1	90.0	99.0
					N.m	2.41	2.82	3.40	3.92	5.15	5.82	6.77	8.82	9.70
			220	60	kgfcm	24.6	28.8	34.7	40.0	52.5	59.4	69.1	90.0	99.0
					N.m	2.41	2.82	3.40	3.92	5.15	5.82	6.77	8.82	9.70
			220/240	50	kgfcm	27.1	31.7	38.1	44.0	57.8	65.3	76.0	99.0	108.9
					N.m	2.65	3.10	3.74	4.31	5.66	6.40	7.45	9.70	10.67

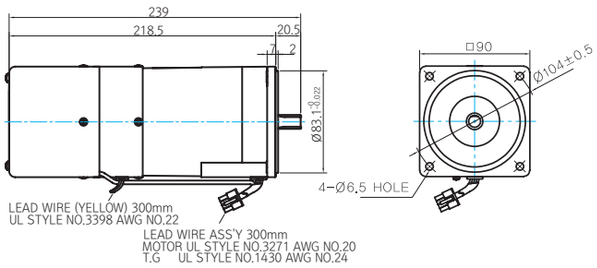
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	5	7.5	10	15	20	25	30	40	50	60	80
9SBG*-90F2WH	9WHD□-030	1200	110	60	kgfcm	25.4	36.8	47.3	66.6	84.1	96.4	112.1	137.8	157.7	163.3	132.7
					N.m	2.49	3.61	4.64	6.52	8.24	9.44	10.99	13.51	15.45	16.00	13.00
			220	60	kgfcm	25.4	36.8	47.3	66.6	84.1	96.4	112.1	137.8	157.7	163.3	132.7
					N.m	2.49	3.61	4.64	6.52	8.24	9.44	10.99	13.51	15.45	16.00	13.00
			220/240	50	kgfcm	26.1	37.8	48.6	68.4	86.4	99.0	115.2	141.6	162.0	163.3	132.7
					N.m	2.56	3.70	4.76	6.70	8.47	9.70	11.29	13.88	15.88	16.00	13.00
		90	110	60	kgfcm	10.4	15.1	19.4	27.4	34.6	39.6	46.1	56.6	64.8	72.0	84.5
					N.m	1.02	1.48	1.91	2.68	3.39	3.88	4.52	5.55	6.35	7.06	8.28
			220	60	kgfcm	10.4	15.1	19.4	27.4	34.6	39.6	46.1	56.6	64.8	72.0	84.5
					N.m	1.02	1.48	1.91	2.68	3.39	3.88	4.52	5.55	6.35	7.06	8.28
			220/240	50	kgfcm	11.5	16.6	21.4	30.1	38.0	43.6	50.7	62.3	71.3	79.2	92.9
					N.m	1.13	1.63	2.10	2.95	3.73	4.27	4.97	6.11	6.99	7.76	9.11

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

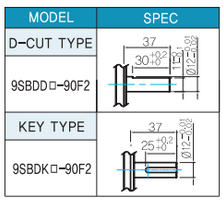
Dimensions

MOTOR ONLY

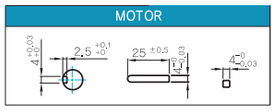
● MOTOR MODEL:
9SBD□□-90F2 (POWERFUL FAN)



● MOTOR OUTPUT SHAFT

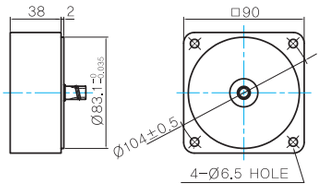
MODEL	SPEC
D-CUT TYPE	
9SBDD□-90F2	
KEY TYPE	
9SBDK□-90F2	

● KEY SPEC

MOTOR


INTER-DECIMAL GEARBOX

● MODEL: 9XD10□□



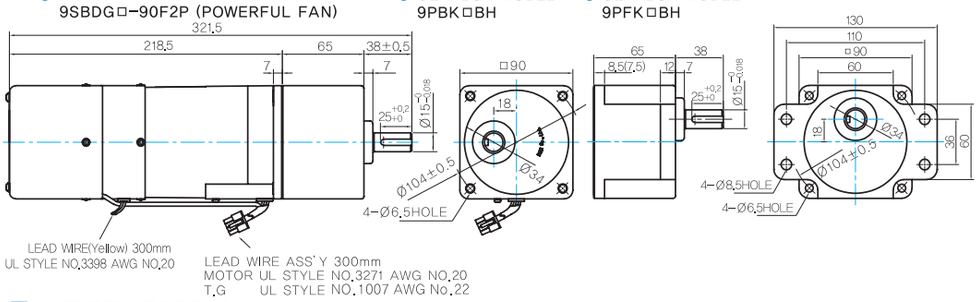
GEARED MOTOR

P TYPE GEARBOX

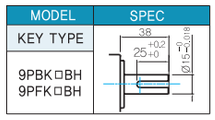
● MOTOR MODEL:
9SBDG□-90F2P (POWERFUL FAN)

● GEARBOX MODEL:
9PBK□BH

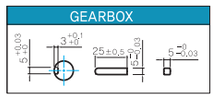
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

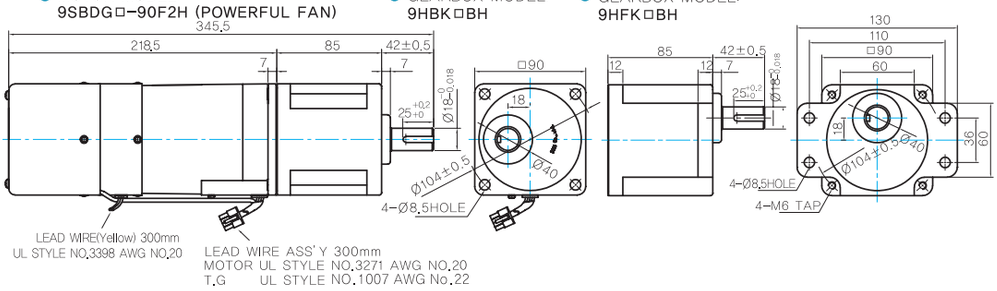
GEARBOX


H TYPE GEARBOX

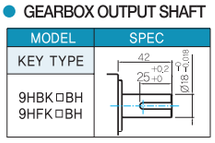
● MOTOR MODEL:
9SBDG□-90F2H (POWERFUL FAN)

● GEARBOX MODEL:
9HBK□BH

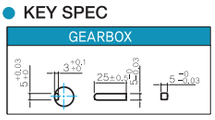
● GEARBOX MODEL:
9HFK□BH



● GEARBOX OUTPUT SHAFT

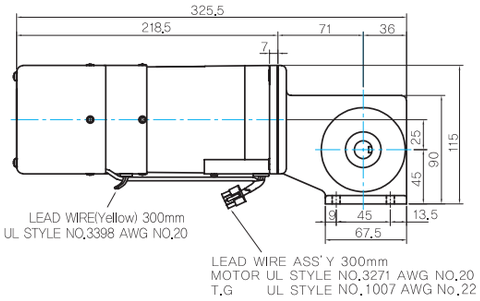
MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

● KEY SPEC

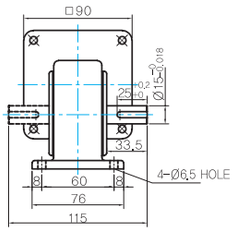
GEARBOX


W TYPE GEARBOX

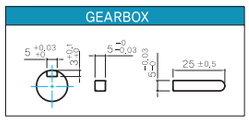
● MOTOR MODEL:
9SBDG□-90F2W (POWERFUL FAN)



● GEARBOX MODEL:
9WD□BL/BR/BRL



● KEY SPEC

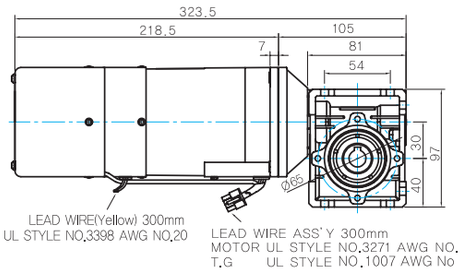
GEARBOX


B AC Motors

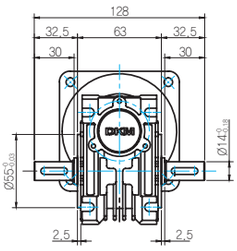
S.C. Brake Motor 90W (□90mm)

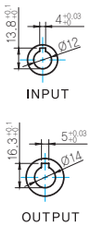
WH TYPE GEARBOX

● MOTOR MODEL:
9SBDG□-90F2WH (POWERFUL FAN)

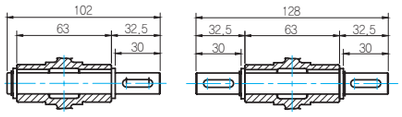


● GEARBOX MODEL:
9WHD□-030



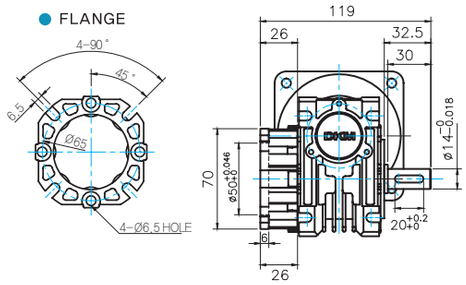


● SHAFT

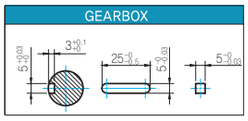


Unidirectional Bi-directional

● FLANGE



● KEY SPEC

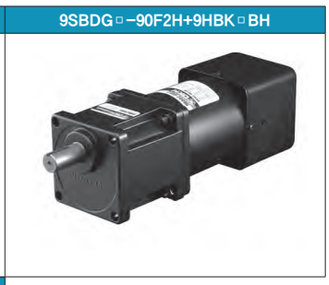


WEIGHT

PART		WEIGHT(kg)
MOTOR		3.70
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WD□BL/BR/BRL	1.00
	9WHD□-030	1.20
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9SBDD□-90F2	9SBDG□-90F2P+9PBK□BH	9SBDG□-90F2P+9PFK□BH	9SBDG□-90F2H+9HBK□BH
			

9SBDG□-90F2H+9HFK□BH	9SBDG□-90F2W+9WD□BL	9SBDG□-90F2WH+9WHD□-030

120W Speed Control Brake Motor 120W(□ 90mm)

Motor Specification

Model 9SBDG*-120F2□-C(L): Gear Type Shaft 9SBDD*-120F2-C(L): D-Cut Type Shaft 9SBDK*-120F2-C(L): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9SBD◇1(A)-120F2□-C	9SBD◇1(A)-120F2□-L	120	1ø110	60	4	30min.	90-1700	7.80	0.780	8.20	0.820	3.60	0.360	30.0 / 250
9SBD◇2(D)-120F2□-C	9SBD◇2(D)-120F2□-L	120	1ø220	60	4	30min.	90-1700	7.60	0.760	8.00	0.800	3.30	0.330	7.0 / 450
9SBD◇E-120F2□-C	9SBD◇E-120F2□-L	120	1ø220	50	4	30min.	90-1400	6.00	0.600	7.50	0.750	3.30	0.330	7.0 / 450
			1ø240					6.50	0.650	8.00	0.800	3.80	0.380	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20
9SBDG*-120F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	13.3	19.9	23.9	33.2	39.9	49.8	59.8	66.4	74.8	89.8	107.7	119.7
					N.m	1.30	1.95	2.34	3.25	3.91	4.88	5.86	6.51	7.33	8.80	10.56	11.73
			220	60	kgfcm	13.0	19.4	23.3	32.4	38.9	48.6	58.3	64.8	73.0	87.6	105.1	116.8
					N.m	1.27	1.91	2.29	3.18	3.81	4.76	5.72	6.35	7.15	8.58	10.30	11.45
			220/240	50	kgfcm	12.2	18.2	21.9	30.4	36.5	45.6	54.7	60.8	68.4	82.1	98.6	109.5
					N.m	1.19	1.79	2.14	2.98	3.57	4.47	5.36	5.95	6.71	8.05	9.66	10.73
		90	110	60	kgfcm	5.8	8.7	10.5	14.6	17.5	21.9	26.2	29.2	32.9	39.4	47.3	52.6
					N.m	0.57	0.86	1.03	1.43	1.71	2.14	2.57	2.86	3.22	3.86	4.64	5.15
			220	60	kgfcm	5.3	8.0	9.6	13.4	16.0	20.0	24.1	26.7	30.1	36.1	43.4	48.2
					N.m	0.52	0.79	0.94	1.31	1.57	1.96	2.36	2.62	2.95	3.54	4.25	4.72
			220/240	50	kgfcm	5.3	8.0	9.6	13.4	16.0	20.0	24.1	26.7	30.1	36.1	43.4	48.2
					N.m	0.52	0.79	0.94	1.31	1.57	1.96	2.36	2.62	2.95	3.54	4.25	4.72

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	25	30	36	40	50	60	75	90	100	120	150	180	200
9SBDG*-120F2P	9PBK□BH 9PFK□BH	1200	110	60	kgfcm	135.3	162.4	194.8	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	13.26	15.91	19.09	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	132.0	158.4	190.1	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	12.94	15.52	18.63	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	123.8	148.5	178.2	198.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	12.13	14.55	17.46	19.40	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
		90	110	60	kgfcm	59.4	71.3	85.5	95.0	118.8	142.6	159.3	191.2	200.0	200.0	200.0	200.0	200.0
					N.m	5.82	6.99	8.38	9.31	11.64	13.97	15.61	18.73	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	54.5	65.3	78.4	87.1	108.9	130.7	146.0	175.2	194.7	200.0	200.0	200.0	200.0
					N.m	5.34	6.40	7.68	8.54	10.67	12.81	14.31	17.17	19.08	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	54.5	65.3	78.4	87.1	108.9	130.7	146.0	175.2	194.7	200.0	200.0	200.0	200.0
					N.m	5.34	6.40	7.68	8.54	10.67	12.81	14.31	17.17	19.08	19.60	19.60	19.60	19.60

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30
9SBDG*-120F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	19.9	23.9	33.2	39.9	49.8	59.8	66.4	74.8	89.8	107.7	119.7	135.3	162.4
					N.m	1.95	2.34	3.25	3.91	4.88	5.86	6.51	7.33	8.80	10.56	11.73	13.26	15.91
			220	60	kgfcm	19.4	23.3	32.4	38.9	48.6	58.3	64.8	73.0	87.6	105.1	116.8	132.0	158.4
					N.m	1.91	2.29	3.18	3.81	4.76	5.72	6.35	7.15	8.58	10.30	11.45	12.94	15.52
			220/240	50	kgfcm	18.2	21.9	30.4	36.5	45.6	54.7	60.8	68.4	82.1	98.6	109.5	123.8	148.5
					N.m	1.79	2.14	2.98	3.57	4.47	5.36	5.95	6.71	8.05	9.66	10.73	12.13	14.55
		90	110	60	kgfcm	8.7	10.5	14.6	17.5	21.9	26.2	29.2	32.9	39.4	47.3	52.6	59.4	71.3
					N.m	0.86	1.03	1.43	1.71	2.14	2.57	2.86	3.22	3.86	4.64	5.15	5.82	6.99
			220	60	kgfcm	8.0	9.6	13.4	16.0	20.0	24.1	26.7	30.1	36.1	43.4	48.2	54.5	65.3
					N.m	0.79	0.94	1.31	1.57	1.96	2.36	2.62	2.95	3.54	4.25	4.72	5.34	6.40
			220/240	50	kgfcm	8.0	9.6	13.4	16.0	20.0	24.1	26.7	30.1	36.1	43.4	48.2	54.5	65.3
					N.m	0.79	0.94	1.31	1.57	1.96	2.36	2.62	2.95	3.54	4.25	4.72	5.34	6.40

S.C. Brake Motor 120W (□ 90mm)

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	36	40	50	60	75	90	100	120	150	180	200
9SBDG*-120F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	194.8	216.5	270.6	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	19.09	21.22	26.52	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220	60	kgfcm	190.1	211.2	264.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	18.63	20.70	25.87	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220/240	50	kgfcm	178.2	198.0	247.5	297.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	17.46	19.40	24.26	29.11	29.40	29.40	29.40	29.40	29.40	29.40	29.40
		90	110	60	kgfcm	85.5	95.0	118.8	142.6	159.3	191.2	212.4	254.9	300.0	300.0	300.0
					N.m	8.38	9.31	11.64	13.97	15.61	18.73	20.82	24.98	29.40	29.40	29.40
			220	60	kgfcm	78.4	87.1	108.9	130.7	146.0	175.2	194.7	233.6	292.1	300.0	300.0
					N.m	7.68	8.54	10.67	12.81	14.31	17.17	19.08	22.90	28.62	29.40	29.40
			220/240	50	kgfcm	78.4	87.1	108.9	130.7	146.0	175.2	194.7	233.6	292.1	300.0	300.0
					N.m	7.68	8.54	10.67	12.81	14.31	17.17	19.08	22.90	28.62	29.40	29.40

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	10	12	15	18	25	30	36	50	60
9SBDG*-120F2W	9WD□BL/□BR/□BRL	1200	110	60	kgfcm	67.2	78.7	94.7	109.2	143.5	162.4	153.1	142.9	122.4
					N.m	6.59	7.71	9.28	10.70	14.06	15.91	15.00	14.00	12.00
			220	60	kgfcm	65.6	76.8	92.4	106.6	140.0	158.4	153.1	142.9	122.4
					N.m	6.43	7.53	9.06	10.44	13.72	15.52	15.00	14.00	12.00
			220/240	50	kgfcm	61.5	72.0	86.6	99.9	131.3	148.5	153.1	142.9	122.4
					N.m	6.03	7.06	8.49	9.79	12.86	14.55	15.00	14.00	12.00
		90	110	60	kgfcm	29.5	34.6	41.6	48.0	63.0	71.3	82.9	108.0	122.4
					N.m	2.89	3.39	4.07	4.70	6.17	6.99	8.13	10.58	12.00
			220	60	kgfcm	27.1	31.7	38.1	44.0	57.8	65.3	76.0	99.0	122.4
					N.m	2.65	3.10	3.74	4.31	5.66	6.40	7.45	9.70	12.00
			220/240	50	kgfcm	27.1	31.7	38.1	44.0	57.8	65.3	76.0	99.0	122.4
					N.m	2.65	3.10	3.74	4.31	5.66	6.40	7.45	9.70	12.00

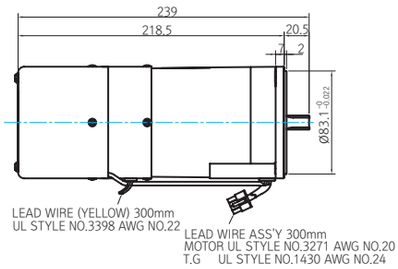
Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	5	7.5	10	15	20	25	30	40	50	60	80
9SBDG*-120F2WH	9WHD□-030	1200	110	60	kgfcm	28.5	41.3	53.1	74.8	94.5	108.2	126.0	154.8	173.5	163.3	132.7
					N.m	2.80	4.05	5.21	7.33	9.26	10.61	12.34	15.17	17.00	16.00	13.00
			220	60	kgfcm	27.8	40.3	51.8	73.0	92.2	105.6	122.9	151.0	173.5	163.3	132.7
					N.m	2.73	3.95	5.08	7.15	9.03	10.35	12.04	14.80	17.00	16.00	13.00
			220/240	50	kgfcm	27.8	40.3	51.8	73.0	92.2	105.6	122.9	151.0	173.5	163.3	132.7
					N.m	2.73	3.95	5.08	7.15	9.03	10.35	12.04	14.80	17.00	16.00	13.00
		90	110	60	kgfcm	12.5	18.1	23.3	32.8	41.5	47.5	55.3	68.0	77.8	86.4	101.4
					N.m	1.23	1.78	2.29	3.22	4.06	4.66	5.42	6.66	7.62	8.47	9.93
			220	60	kgfcm	11.5	16.6	21.4	30.1	38.0	43.6	50.7	62.3	71.3	79.2	92.9
					N.m	1.13	1.63	2.10	2.95	3.73	4.27	4.97	6.11	6.99	7.76	9.11
			220/240	50	kgfcm	13.2	19.2	24.6	34.7	43.8	50.2	58.4	71.7	82.1	91.2	107.0
					N.m	1.30	1.88	2.41	3.40	4.29	4.92	5.72	7.03	8.04	8.94	10.49

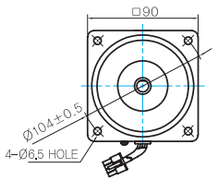
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

Dimensions

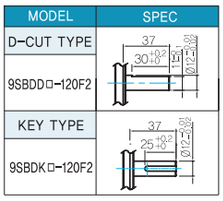
MOTOR ONLY

- MOTOR MODEL:
  9SBD□□-120F2 (POWERFUL FAN)

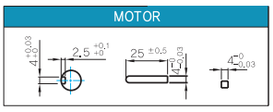




- MOTOR OUTPUT SHAFT

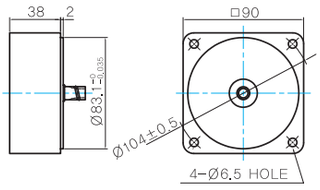
MODEL	SPEC
D-CUT TYPE	
9SBDD□-120F2	
KEY TYPE	
9SBDK□-120F2	

- KEY SPEC

MOTOR


INTER-DECIMAL GEARBOX

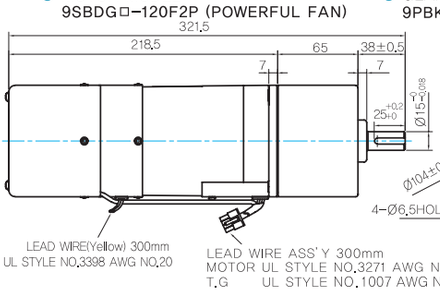
- MODEL: 9XD10□□



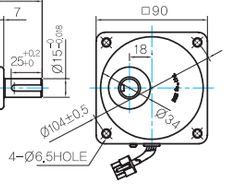
GEARED MOTOR

P TYPE GEARBOX

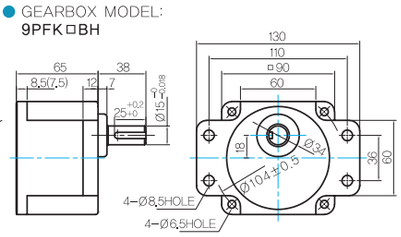
- MOTOR MODEL:
  9SBDG□-120F2P (POWERFUL FAN)



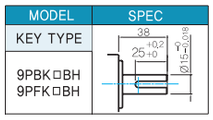
- GEARBOX MODEL:
  9PBK□BH



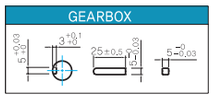
- GEARBOX MODEL:
  9PFK□BH



- GEARBOX OUTPUT SHAFT

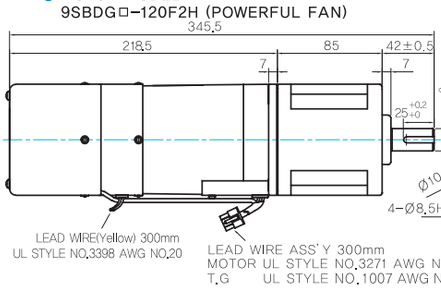
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

- KEY SPEC

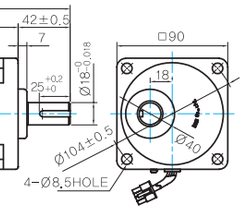
GEARBOX


H TYPE GEARBOX

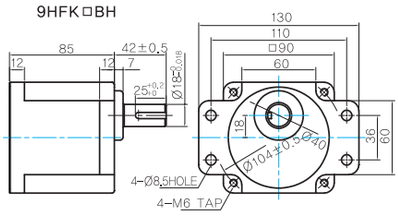
- MOTOR MODEL:
  9SBDG□-120F2H (POWERFUL FAN)



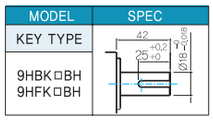
- GEARBOX MODEL:
  9HBK□BH



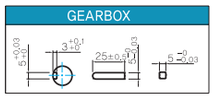
- GEARBOX MODEL:
  9HFK□BH



- GEARBOX OUTPUT SHAFT

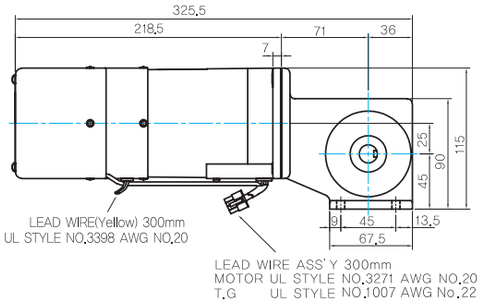
MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

- KEY SPEC

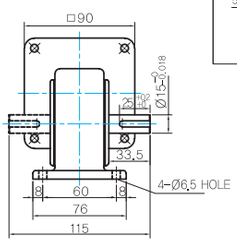
GEARBOX


W TYPE GEARBOX

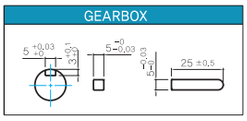
- MOTOR MODEL:
  9SBDG□-120F2W (POWERFUL FAN)



- GEARBOX MODEL:
  9WD□BL/BR/BRL



- KEY SPEC

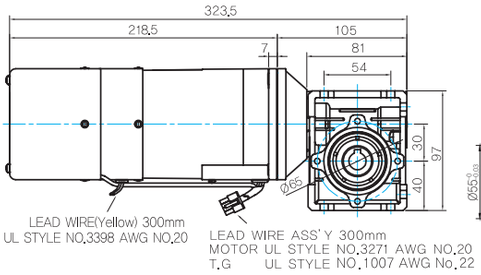
GEARBOX


B AC Motors

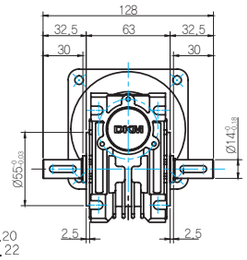
S.C. Brake Motor 120W (□ 90mm)

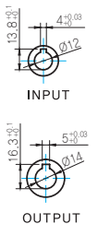
WH TYPE GEARBOX

● MOTOR MODEL:
9SBDG□-120F2WH (POWERFUL FAN)

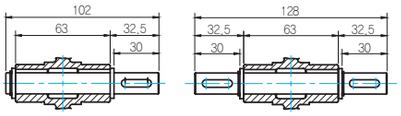


● GEARBOX MODEL:
9WHD□-030



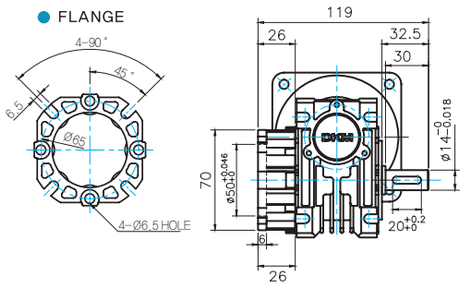


● SHAFT

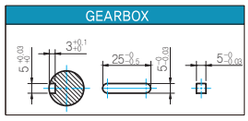


Unidirectional Bi-directional

● FLANGE



● KEY SPEC



WEIGHT

PART		WEIGHT(kg)
MOTOR		3.70
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WD□BL/BR/BRL	1.00
	9WHD□-030	1.20
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9SBDD□-120F2	9SBDG□-120F2P+9PBK□BH	9SBDG□-120F2P+9PFK□BH	9SBDG□-120F2H+9HBK□BH

9SBDG□-120F2H+9HFK□BH	9SBDG□-120F2W+9WD□BL	9SBDG□-120F2WH+9WHD□-030

180W Speed Control Brake Motor 180W (□ 90mm)

Motor Specification

Model 9SBDG*-180F2□-C(L): Gear Type Shaft 9SBDD*-180F2-C(L): D-Cut Type Shaft 9SBDK*-180F2-C(L): Key Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9SBD◇1(A)-180F2□-C	9SBD◇1(A)-180F2□-L	180	1ø110	60	4	30min.	90-1700	6.40	0.640	10.00	1.000	3.00	0.300	30.0 / 250
9SBD◇2(D)-180F2□-C	9SBD◇2(D)-180F2□-L	180	1ø220	60	4	30min.	90-1700	6.40	0.640	10.00	1.000	3.00	0.300	8.0 / 450
9SBD◇E-180F2□-C	9SBD◇E-180F2□-L	180	1ø220	50	4	30min.	90-1400	6.40	0.640	10.00	1.000	3.00	0.300	8.0 / 450
			1ø240					7.00	0.700	11.00	1.100	3.30	0.330	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the output shaft type of motor in the place ◇ (G: Gear Type / D: D-Cut Type / K: Key Type). and D-Cut Type Shaft / Key Type Shaft are for using the motor only.
3) If the motor output shaft type is Gear Type, □ contains the model type name of the gearbox being attached.
4) The phase & voltage code A, D, E contain a built-in thermal protector.

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25
9SBDG*-180F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	24.3	29.2	40.5	48.6	60.8	72.9	81.0	91.3	109.5	131.4	146.0	165.0
					N.m	2.38	2.86	3.97	4.76	5.95	7.14	7.94	8.94	10.73	12.88	14.31	16.17
			220	60	kgfcm	24.3	29.2	40.5	48.6	60.8	72.9	81.0	91.3	109.5	131.4	146.0	165.0
					N.m	2.38	2.86	3.97	4.76	5.95	7.14	7.94	8.94	10.73	12.88	14.31	16.17
			220/240	50	kgfcm	24.3	29.2	40.5	48.6	60.8	72.9	81.0	91.3	109.5	131.4	146.0	165.0
					N.m	2.38	2.86	3.97	4.76	5.95	7.14	7.94	8.94	10.73	12.88	14.31	16.17
		90	110	60	kgfcm	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5
					N.m	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85
			220	60	kgfcm	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5
					N.m	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85
			220/240	50	kgfcm	7.3	8.7	12.2	14.6	18.2	21.9	24.3	27.4	32.9	39.4	43.8	49.5
					N.m	0.71	0.86	1.19	1.43	1.79	2.14	2.38	2.68	3.22	3.86	4.29	4.85

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	30	36	40	50	60	75	90	100	120	150	180	200
9SBDG*-180F2H	9HBK□BH 9HFK□BH	1200	110	60	kgfcm	198.0	237.6	264.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	19.40	23.28	25.87	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220	60	kgfcm	198.0	237.6	264.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	19.40	23.28	25.87	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
			220/240	50	kgfcm	198.0	237.6	264.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
					N.m	19.40	23.28	25.87	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40	29.40
		90	110	60	kgfcm	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	212.4	265.5	300.0	300.0
					N.m	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	20.82	26.02	29.40	29.40
			220	60	kgfcm	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	212.4	265.5	300.0	300.0
					N.m	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	20.82	26.02	29.40	29.40
			220/240	50	kgfcm	59.4	71.3	79.2	99.0	118.8	132.8	159.3	177.0	212.4	265.5	300.0	300.0
					N.m	5.82	6.99	7.76	9.70	11.64	13.01	15.61	17.35	20.82	26.02	29.40	29.40

1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

B AC Motors

S.C. Brake Motor 180W (□90mm)

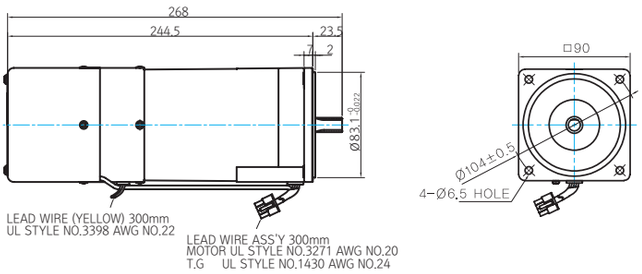
Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	5	7.5	10	15	20	25	30	40	50	60	80	100
9SBDG*-180F2WH	9WHD□-030	1200	110	60	kgfcm	34.8	50.4	64.8	91.2	115.2	132.0	153.6	183.7	173.5	163.3	132.7	–
					N.m	3.41	4.94	6.35	8.94	11.29	12.94	15.05	18.00	17.00	16.00	13.00	–
			220	60	kgfcm	34.8	50.4	64.8	91.2	115.2	132.0	153.6	183.7	173.5	163.3	132.7	–
					N.m	3.41	4.94	6.35	8.94	11.29	12.94	15.05	18.00	17.00	16.00	13.00	–
			220/240	50	kgfcm	34.8	50.4	64.8	91.2	115.2	132.0	153.6	183.7	173.5	163.3	132.7	–
					N.m	3.41	4.94	6.35	8.94	11.29	12.94	15.05	18.00	17.00	16.00	13.00	–
		90	110	60	kgfcm	10.4	15.1	19.4	27.4	34.6	39.6	46.1	56.6	64.8	72.0	84.5	–
					N.m	1.02	1.48	1.91	2.68	3.39	3.88	4.52	5.55	6.35	7.06	8.28	–
			220	60	kgfcm	10.4	15.1	19.4	27.4	34.6	39.6	46.1	56.6	64.8	72.0	84.5	–
					N.m	1.02	1.48	1.91	2.68	3.39	3.88	4.52	5.55	6.35	7.06	8.28	–
			220/240	50	kgfcm	10.4	15.1	19.4	27.4	34.6	39.6	46.1	56.6	64.8	72.0	84.5	–
					N.m	1.02	1.48	1.91	2.68	3.39	3.88	4.52	5.55	6.35	7.06	8.28	–
9SBDG*-180F2WH	9WHD□-040	1200	110	60	kgfcm	–	–	–	–	–	–	–	–	244.0	273.6	295.0	270.0
					N.m	–	–	–	–	–	–	–	–	23.91	26.81	28.91	26.46
			220	60	kgfcm	–	–	–	–	–	–	–	–	244.0	273.6	295.0	270.0
					N.m	–	–	–	–	–	–	–	–	23.91	26.81	28.91	26.46
			220/240	50	kgfcm	–	–	–	–	–	–	–	–	244.0	273.6	295.0	270.0
					N.m	–	–	–	–	–	–	–	–	23.91	26.81	28.91	26.46
		90	110	60	kgfcm	–	–	–	–	–	–	–	–	73.2	82.1	97.9	112.8
					N.m	–	–	–	–	–	–	–	–	7.17	8.04	9.60	11.05
			220	60	kgfcm	–	–	–	–	–	–	–	–	73.2	82.1	97.9	112.8
					N.m	–	–	–	–	–	–	–	–	7.17	8.04	9.60	11.05
			220/240	50	kgfcm	–	–	–	–	–	–	–	–	73.2	82.1	97.9	112.8
					N.m	–	–	–	–	–	–	–	–	7.17	8.04	9.60	11.05

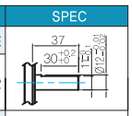
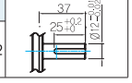
Dimensions

MOTOR ONLY

● MOTOR MODEL:
9SBD□□-180F2 (POWERFUL FAN)

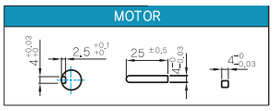


● MOTOR OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	
9SBDD□-180F2	
KEY TYPE	
9SBDK□-180F2	

● KEY SPEC

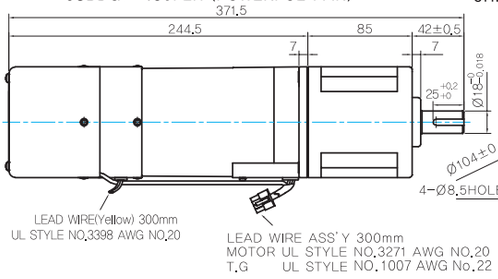
MOTOR



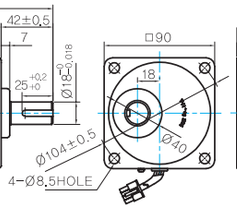
GEARED MOTOR

H TYPE GEARBOX

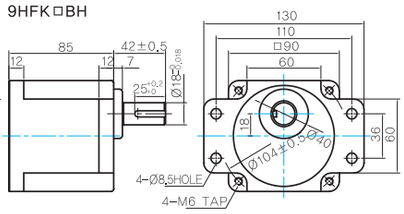
● MOTOR MODEL:
9SBDG□-180F2H (POWERFUL FAN)



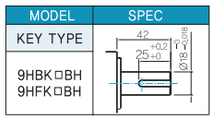
● GEARBOX MODEL:
9HBK□BH



● GEARBOX MODEL:
9HFK□BH

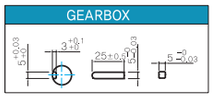


● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

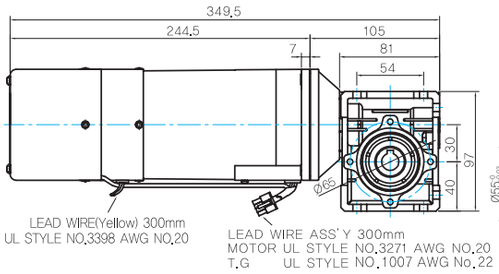
● KEY SPEC

GEARBOX

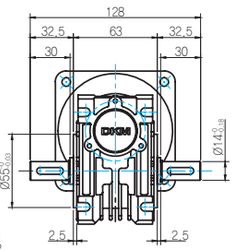


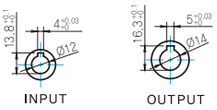
WH TYPE GEARBOX

● MOTOR MODEL:
9SBDG□-180F2WH (POWERFUL FAN)

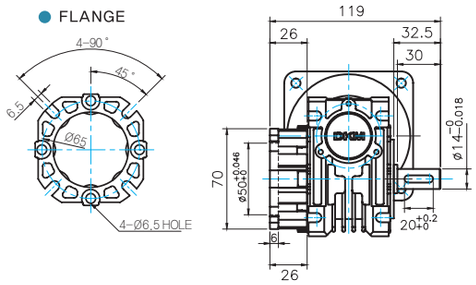


● GEARBOX MODEL:
9WHD□-030

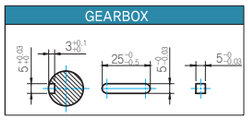




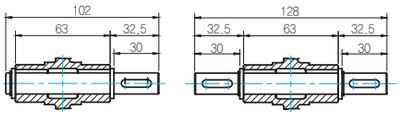
● FLANGE



● KEY SPEC

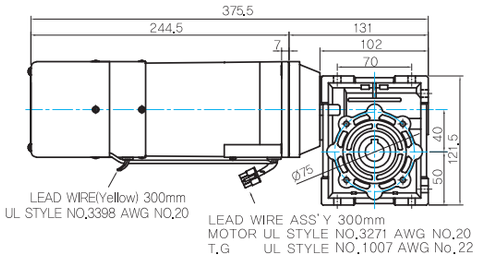


● SHAFT

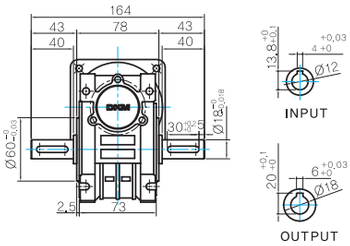


Unidirectional Bi-directional

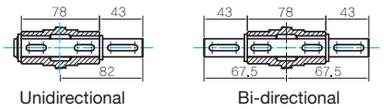
● MOTOR MODEL:
9WHD□-180F2WH (POWERFUL FAN)



● GEARBOX MODEL:
9WHD□-040

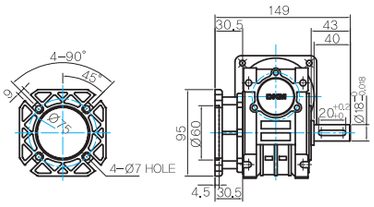


● SHAFT

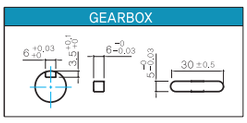


Unidirectional Bi-directional

● FLANGE



● KEY SPEC



WEIGHT

PART		WEIGHT(kg)
MOTOR		4.50
GEAR BOX	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WHD□-030	1.20
	9WHD□-040	2.10
	9XD10○○	0.60

*The output flange and shaft are sold separately.

B AC Motors

S.C. Brake Motor 180W (□90mm)

Motor Images

9SBDD□-180F2	9SBDG□-180F2H+9HBK□BH	9SBDG□-180F2H+9HFK□BH	9SBDG□-180F2WH+9WHD□

Speed Control Clutch & Brake Motor

Index

Speed Control Clutch & Brake Motor 15W (□80mm)	B-323
Speed Control Clutch & Brake Motor 25W (□80mm)	B-325
Speed Control Clutch & Brake Motor 40W (□90mm)	B-327
Speed Control Clutch & Brake Motor 60W (□90mm)	B-329
Speed Control Clutch & Brake Motor 90W (□90mm)	B-331
Speed Control Clutch & Brake Motor 120W (□90mm)	B-333

S.C. C&B Motor 15W (□ 80mm)

15W Speed Control Clutch & Brake Motor 15W(□ 80mm)

Motor Specification

Model 8CSDG*-15G-C(L): Gear Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
8CSDG1(A)-15G-C	8CSDG1(A)-15G-L	15	1ø110	60	4	Cont.	90-1700	0.70	0.070	1.50	0.150	0.45	0.045	3.5 / 250
8CSDGB-15G-C	8CSDGB-15G-L	15	1ø100	50	4	Cont.	90-1400	0.70	0.070	1.40	0.140	0.45	0.045	5.0 / 250
				60			90-1700	0.70	0.070	1.50	0.150	0.45	0.045	
8CSDGC-15G-C	8CSDGC-15G-L	15	1ø200	50	4	Cont.	90-1400	0.70	0.070	1.40	0.140	0.45	0.045	1.2 / 450
				60			90-1700	0.70	0.070	1.50	0.150	0.45	0.045	
8CSDG2(D)-15G-C	8CSDG2(D)-15G-L	15	1ø220	60	4	Cont.	90-1700	0.70	0.070	1.50	0.150	0.45	0.045	1.2 / 450
8CSDGE-15G-C	8CSDGE-15G-L	15	1ø220	50	4	Cont.	90-1400	0.65	0.065	1.20	0.120	0.43	0.043	1.2 / 450
			1ø240					0.70	0.070	1.40	0.140	0.45	0.045	

1) Enter the phase & voltage code in the place * within the motor model name.
2) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.
3) For using speed control clutch & brake motor, the gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30
8CSDG*-15G	8GBK□ BMH	1200	110	60	kgfcm	3.6	4.4	6.1	7.3	9.1	10.9	12.2	15.2	18.2	21.9	21.9	27.4	32.9
					N.m	0.36	0.43	0.60	0.71	0.89	1.07	1.19	1.49	1.79	2.14	2.15	2.68	3.22
			220	60	kgfcm	3.6	4.4	6.1	7.3	9.1	10.9	12.2	15.2	18.2	21.9	21.9	27.4	32.9
					N.m	0.36	0.43	0.60	0.71	0.89	1.07	1.19	1.49	1.79	2.14	2.15	2.68	3.22
			220/240	50	kgfcm	3.4	4.1	5.7	6.8	8.5	10.2	11.3	14.2	17.0	20.4	20.4	25.6	30.7
					N.m	0.33	0.40	0.56	0.67	0.83	1.00	1.11	1.39	1.67	2.00	2.00	2.50	3.00
		90	110	60	kgfcm	1.1	1.3	1.8	2.2	2.7	3.3	3.6	4.6	5.5	6.6	6.6	8.2	9.9
					N.m	0.11	0.13	0.18	0.21	0.27	0.32	0.36	0.45	0.54	0.64	0.64	0.80	0.97
			220	60	kgfcm	1.1	1.3	1.8	2.2	2.7	3.3	3.6	4.6	5.5	6.6	6.6	8.2	9.9
					N.m	0.11	0.13	0.18	0.21	0.27	0.32	0.36	0.45	0.54	0.64	0.64	0.80	0.97
			220/240	50	kgfcm	1.1	1.3	1.8	2.2	2.7	3.3	3.6	4.6	5.5	6.6	6.6	8.2	9.9
					N.m	0.11	0.13	0.18	0.21	0.27	0.32	0.36	0.45	0.54	0.64	0.64	0.80	0.97

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	36	40	50	60	75	90	100	120	150	180	200	250	300	360
8CSDG*-15G	8GBK□ BMH	1200	110	60	kgfcm	39.4	43.8	49.5	59.4	74.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	3.86	4.29	4.85	5.82	7.28	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220	60	kgfcm	39.4	43.8	49.5	59.4	74.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	3.86	4.29	4.85	5.82	7.28	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220/240	50	kgfcm	36.8	40.9	46.2	55.4	69.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	3.61	4.01	4.53	5.43	6.79	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
		90	110	60	kgfcm	11.8	13.1	14.9	17.8	22.3	26.7	29.7	35.6	44.6	53.5	59.4	74.3	80.0	80.0
					N.m	1.16	1.29	1.46	1.75	2.18	2.62	2.91	3.49	4.37	5.24	5.82	7.28	7.84	7.84
			220	60	kgfcm	11.8	13.1	14.9	17.8	22.3	26.7	29.7	35.6	44.6	53.5	59.4	74.3	80.0	80.0
					N.m	1.16	1.29	1.46	1.75	2.18	2.62	2.91	3.49	4.37	5.24	5.82	7.28	7.84	7.84
			220/240	50	kgfcm	11.8	13.1	14.9	17.8	22.3	26.7	29.7	35.6	44.6	53.5	59.4	74.3	80.0	80.0
					N.m	1.16	1.29	1.46	1.75	2.18	2.62	2.91	3.49	4.37	5.24	5.82	7.28	7.84	7.84

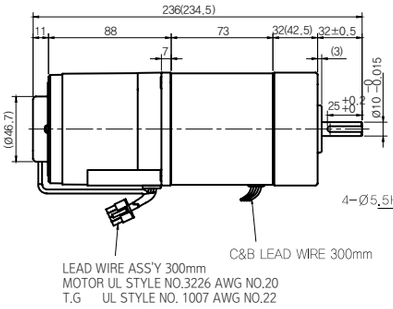
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

Dimensions

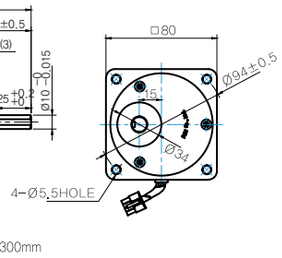
GEARED MOTOR

G TYPE GEARBOX

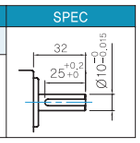
● MOTOR MODEL:
8CSDG□-15G



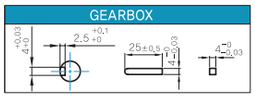
● GEARBOX MODEL:
8GBK□BMH



● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
8GBK□BMH	

● KEY SPEC

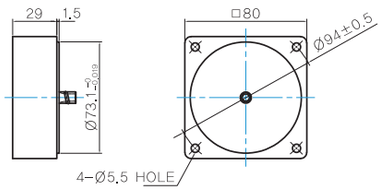
GEARBOX


● 32(42.5)-Table1

SIZE(mm)	GEAR RATIO
32	8GBK3BMH - 8GBK18BMH
42.5	8GBK20BMH - 8GBK360BMH

INTER-DECIMAL GEARBOX

● MODEL: 8XD10□□



WEIGHT

PART		WEIGHT(kg)
MOTOR		2.83
GEAR BOX	8GBK3BMH - 8GBK18BMH	0.56
	8GBK20BMH - 8GBK40BMH	0.65
	8GBK50BMH - 8GBK360BMH	0.72
	8XD10○○	0.45

*The output flange and shaft are sold separately.

Motor Images

8CSDG□-15G+8GBK□BMH

25W Speed Control Clutch & Brake Motor 25W(□ 80mm)

Motor Specification

Model 8CSDG*-25G-C(L): Gear Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
8CSDG1(A)-25G-C	8CSDG1(A)-25G-L	25	1ø110	60	4	Cont.	90-1700	1.00	0.100	1.70	0.170	0.60	0.060	6.0 / 250
8CSDGB-25G-C	8CSDGB-25G-L	25	1ø100	50	4	Cont.	90-1400	0.80	0.800	1.50	0.150	0.50	0.050	6.0 / 250
				60			90-1700	0.90	0.090	1.70	0.170	0.60	0.060	
8CSDGC-25G-C	8CSDGC-25G-L	25	1ø200	50	4	Cont.	90-1400	0.80	0.800	1.50	0.150	0.50	0.050	1.5 / 450
				60			90-1700	0.90	0.090	1.70	0.170	0.60	0.060	
8CSDG2(D)-25G-C	8CSDG2(D)-25G-L	25	1ø220	60	4	Cont.	90-1700	1.00	0.100	1.80	0.180	0.60	0.060	1.5 / 450
8CSDGE-25G-C	8CSDGE-25G-L	25	1ø220	50	4	Cont.	90-1400	0.80	0.080	1.50	0.150	0.50	0.050	1.5 / 450
			1ø240					1.00	0.100	1.80	0.180	0.52	0.052	

1) Enter the phase & voltage code in the place * within the motor model name.
2) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.
3) For using speed control clutch & brake motor, the gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30
8CSDG*-25G	8GBK□BMH	1200	110	60	kgfcm	4.1	5.0	6.9	8.3	10.3	12.4	13.8	17.2	20.7	24.8	24.8	31.0	37.2
					N.m	0.40	0.49	0.67	0.81	1.01	1.21	1.35	1.69	2.02	2.43	2.43	3.04	3.65
			220	60	kgfcm	4.4	5.2	7.3	8.7	10.9	13.1	14.6	18.2	21.9	26.2	26.3	32.9	39.4
					N.m	0.43	0.51	0.71	0.86	1.07	1.29	1.43	1.79	2.14	2.57	2.58	3.22	3.86
			220/240	50	kgfcm	4.4	5.2	7.3	8.7	10.9	13.1	14.6	18.2	21.9	26.2	26.3	32.9	39.4
					N.m	0.43	0.51	0.71	0.86	1.07	1.29	1.43	1.79	2.14	2.57	2.58	3.22	3.86
		90	110	60	kgfcm	1.5	1.7	2.4	2.9	3.6	4.4	4.9	6.1	7.3	8.7	8.8	11.0	13.1
					N.m	0.14	0.17	0.24	0.29	0.36	0.43	0.48	0.60	0.71	0.86	0.86	1.07	1.29
			220	60	kgfcm	1.5	1.7	2.4	2.9	3.6	4.4	4.9	6.1	7.3	8.7	8.8	11.0	13.1
					N.m	0.14	0.17	0.24	0.29	0.36	0.43	0.48	0.60	0.71	0.86	0.86	1.07	1.29
			220/240	50	kgfcm	1.3	1.5	2.1	2.5	3.2	3.8	4.2	5.3	6.3	7.6	7.6	9.5	11.4
					N.m	0.12	0.15	0.21	0.25	0.31	0.37	0.41	0.52	0.62	0.74	0.74	0.93	1.12

Motor Model	Gearbox Model	r/min	V	Hz	Gear Ratio	36	40	50	60	75	90	100	120	150	180	200	250	300	360
8CSDG*-25G	8GBK□BMH	1200	110	60	kgfcm	44.7	49.6	56.1	67.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	4.38	4.86	5.50	6.60	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220	60	kgfcm	47.3	52.6	59.4	71.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	4.64	5.15	5.82	6.99	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
			220/240	50	kgfcm	47.3	52.6	59.4	71.3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0
					N.m	4.64	5.15	5.82	6.99	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84
		90	110	60	kgfcm	15.8	17.5	19.8	23.8	29.7	35.6	39.6	47.5	59.4	71.3	79.2	80.0	80.0	80.0
					N.m	1.55	1.72	1.94	2.33	2.91	3.49	3.88	4.66	5.82	6.99	7.76	7.84	7.84	7.84
			220	60	kgfcm	15.8	17.5	19.8	23.8	29.7	35.6	39.6	47.5	59.4	71.3	79.2	80.0	80.0	80.0
					N.m	1.55	1.72	1.94	2.33	2.91	3.49	3.88	4.66	5.82	6.99	7.76	7.84	7.84	7.84
			220/240	50	kgfcm	13.7	15.2	17.2	20.6	25.7	30.9	34.3	41.2	51.5	61.8	68.6	80.0	80.0	80.0
					N.m	1.34	1.49	1.68	2.02	2.52	3.03	3.36	4.04	5.05	6.05	6.73	7.84	7.84	7.84

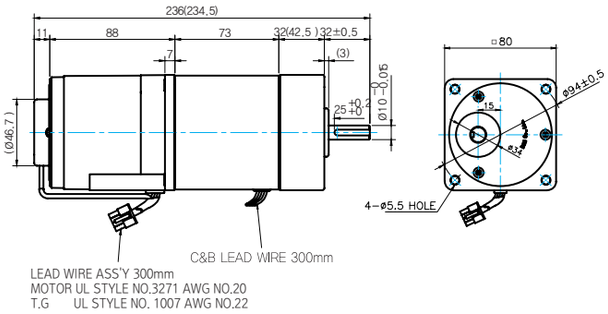
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

Dimensions

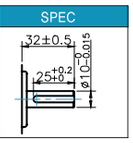
GEARED MOTOR

G TYPE GEARBOX

- MOTOR MODEL:
  8CSDG□-25G-C
- GEARBOX MODEL:
  8GBK□BMH



- GEARBOX OUTPUT SHAFT

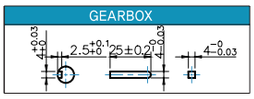
MODEL	SPEC
KEY TYPE	
8GBK□BMH	

- 32(42.5)-Table1

SIZE(mm)	GEAR RATIO
32	8GBK3BMH – 8GBK18BMH
42.5	8GBK20BMH – 8GBK360BMH

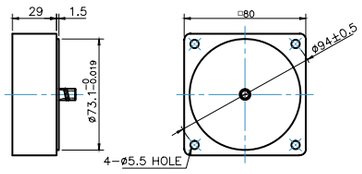
- KEY SPEC

GEARBOX



INTER-DECIMAL GEARBOX

- MODEL:
  8XD10□□



WEIGHT

PART		WEIGHT(kg)
MOTOR		2.83
GEAR BOX	8GBK3BMH - 8GBK18BMH	0.56
	8GBK20BMH - 8GBK40BMH	0.65
	8GBK50BMH - 8GBK360BMH	0.72
	8XD10○○	0.45

*The output flange and shaft are sold separately.

Motor Images

8CSDG□-25G+8GBK□BMH

40W Speed Control Clutch & Brake Motor 40W(□90mm)

Motor Specification

Model 9CSDG*-40G-C(L): Gear Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque 1200r/min		Permissible Torque 90r/min		Capacitor
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9CSDG1(A)-40□-C	9CSDG1(A)-40□-L	40	1ø110	60	4	Cont.	90-1700	1.80	0.180	2.70	0.270	0.80	0.080	10.0 / 250
9CSDGB-40□-C	9CSDGB-40□-L	40	1ø100	50	4	Cont.	90-1400	1.60	0.160	2.50	0.250	0.70	0.070	10.0 / 250
				60			90-1700	1.60	0.160	2.50	0.250	0.70	0.070	
9CSDGC-40□-C	9CSDGC-40□-L	40	1ø200	50	4	Cont.	90-1400	1.90	0.190	3.00	0.300	0.80	0.080	3.0 / 450
				60			90-1700	1.90	0.190	2.80	0.280	0.80	0.080	
9CSDG2(D)-40□-C	9CSDG2(D)-40□-L	40	1ø220	60	4	Cont.	90-1700	1.80	0.180	2.70	0.270	0.80	0.080	2.5 / 450
9CSDGE-40□-C	9CSDGE-40□-L	40	1ø220	50	4	Cont.	90-1400	1.50	0.150	2.50	0.250	0.70	0.070	2.5 / 450
			1ø240					1.80	0.180	3.00	0.300	0.72	0.072	

1) Enter the phase & voltage code in the place * within the motor model name.
2) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.
3) For using speed control clutch & brake motor, the gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	2	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
9CSDG*-40G	9GBK□BMH	1200	110	60	kgfcm	4.4	6.6	7.9	10.9	13.1	16.4	19.7	21.9	27.3	32.8	39.4	39.4	49.3	59.1	71.0	78.8	89.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					N.m	0.43	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.68	3.21	3.86	3.86	4.83	5.79	6.95	7.73	8.73	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
			220	60	kgfcm	4.4	6.6	7.9	10.9	13.1	16.4	19.7	21.9	27.3	32.8	39.4	39.4	49.3	59.1	71.0	78.8	89.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					N.m	0.43	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.68	3.21	3.86	3.86	4.83	5.79	6.95	7.73	8.73	9.80	9.80	9.80	9.80	9.80	9.80	9.80	9.80
			220/240	50	kgfcm	4.1	6.1	7.3	10.1	12.2	15.2	18.2	20.3	25.3	30.4	36.5	36.5	45.6	54.8	65.7	73.0	82.5	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
					N.m	0.40	0.60	0.71	0.99	1.19	1.49	1.79	1.98	2.48	2.98	3.57	3.58	4.47	5.37	6.44	7.15	8.09	9.70	9.80	9.80	9.80	9.80	9.80	9.80	9.80
		90	110	60	kgfcm	1.3	1.9	2.3	3.2	3.9	4.9	5.8	6.5	8.1	9.7	11.7	11.7	14.6	17.5	21.0	23.4	26.4	31.7	39.6	47.5	52.8	63.4	79.2	95.0	100.0
					N.m	0.13	0.19	0.23	0.32	0.38	0.48	0.57	0.64	0.79	0.95	1.14	1.14	1.43	1.72	2.06	2.29	2.59	3.10	3.88	4.66	5.17	6.21	7.76	9.31	9.80
			220	60	kgfcm	1.3	1.9	2.3	3.2	3.9	4.9	5.8	6.5	8.1	9.7	11.7	11.7	14.6	17.5	21.0	23.4	26.4	31.7	39.6	47.5	52.8	63.4	79.2	95.0	100.0
					N.m	0.13	0.19	0.23	0.32	0.38	0.48	0.57	0.64	0.79	0.95	1.14	1.14	1.43	1.72	2.06	2.29	2.59	3.10	3.88	4.66	5.17	6.21	7.76	9.31	9.80
			220/240	50	kgfcm	1.1	1.7	2.0	2.8	3.4	4.3	5.1	5.7	7.1	8.5	10.2	10.2	12.8	15.3	18.4	20.4	23.1	27.7	34.7	41.6	46.2	55.4	69.3	83.2	92.4
					N.m	0.11	0.17	0.20	0.28	0.33	0.42	0.50	0.56	0.69	0.83	1.00	1.00	1.25	1.50	1.80	2.00	2.26	2.72	3.40	4.07	4.53	5.43	6.79	8.15	9.06

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	2	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
9CSDG*-40P	9PBK□BH / 9PFK□BH	1200	110	60	kgfcm	4.4	6.6	7.9	10.9	13.1	16.4	19.7	21.9	24.6	29.6	35.5	39.4	44.6	53.5	64.2	71.3	89.1	106.9	119.5	143.4	159.3	191.2	200.0	200.0	200.0
					N.m	0.43	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.41	2.90	3.48	3.86	4.37	5.24	6.29	6.99	8.73	10.48	11.71	14.05	15.61	18.73	19.60	19.60	19.60
			220	60	kgfcm	4.4	6.6	7.9	10.9	13.1	16.4	19.7	21.9	24.6	29.6	35.5	39.4	44.6	53.5	64.2	71.3	89.1	106.9	119.5	143.4	159.3	191.2	200.0	200.0	200.0
					N.m	0.43	0.64	0.77	1.07	1.29	1.61	1.93	2.14	2.41	2.90	3.48	3.86	4.37	5.24	6.29	6.99	8.73	10.48	11.71	14.05	15.61	18.73	19.60	19.60	19.60
			220/240	50	kgfcm	4.1	6.1	7.3	10.1	12.2	15.2	18.2	20.3	22.8	27.4	32.9	36.5	41.3	49.5	59.4	66.0	82.5	99.0	110.6	132.8	147.5	177.0	200.0	200.0	200.0
					N.m	0.40	0.60	0.71	0.99	1.19	1.49	1.79	1.98	2.24	2.68	3.22	3.58	4.04	4.85	5.82	6.47	8.09	9.70	10.84	13.01	14.46	17.35	19.60	19.60	19.60
		90	110	60	kgfcm	1.3	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.3	8.8	10.5	11.7	13.2	15.8	19.0	21.1	26.4	31.7	35.4	42.5	47.2	56.6	70.8	85.0	94.4
					N.m	0.13	0.19	0.23	0.32	0.38	0.48	0.57	0.64	0.72	0.86	1.03	1.14	1.29	1.55	1.86	2.07	2.59	3.10	3.47	4.16	4.63	5.55	6.94	8.33	9.25
			220	60	kgfcm	1.3	1.9	2.3	3.2	3.9	4.9	5.8	6.5	7.3	8.8	10.5	11.7	13.2	15.8	19.0	21.1	26.4	31.7	35.4	42.5	47.2	56.6	70.8	85.0	94.4
					N.m	0.13	0.19	0.23	0.32	0.38	0.48	0.57	0.64	0.72	0.86	1.03	1.14	1.29	1.55	1.86	2.07	2.59	3.10	3.47	4.16	4.63	5.55	6.94	8.33	9.25
			220/240	50	kgfcm	1.1	1.7	2.0	2.8	3.4	4.3	5.1	5.7	6.4	7.7	9.2	10.2	11.6	13.9	16.6	18.5	23.1	27.7	31.0	37.2	41.3	49.6	62.0	74.3	82.6
					N.m	0.11	0.17	0.20	0.28	0.33	0.42	0.50	0.56	0.63	0.75	0.90	1.00	1.13	1.36	1.63	1.81	2.26	2.72	3.04	3.64	4.05	4.86	6.07	7.29	8.09

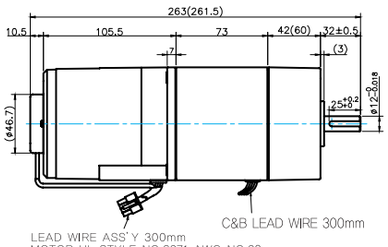
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

Dimensions

GEARED MOTOR

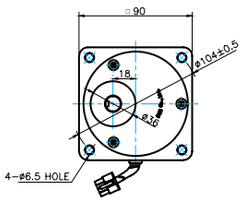
G TYPE GEARBOX

● MOTOR MODEL:
9CSDG□-40G-C

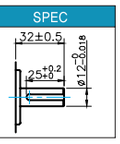


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1430 AWG No.24

● GEARBOX MODEL:
9GBK□BMH

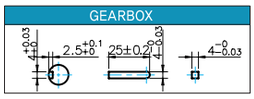


● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9GBK□BMH	

● KEY SPEC

GEARBOX

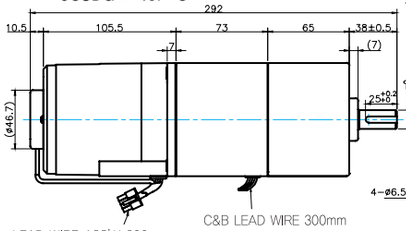


● 42(60)-Table1

SIZE(mm)	GEAR RATIO
42	9GBK2BMH – 9GBK18BMH
60	9GBK20BMH – 9GBK200BMH

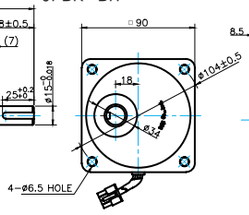
P TYPE GEARBOX

● MOTOR MODEL:
9CSDG□-40P-C

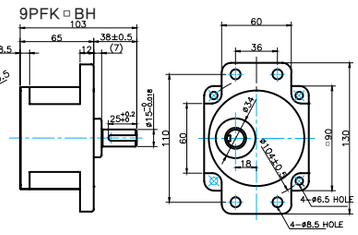


LEAD WIRE ASS'Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1430 AWG No.24

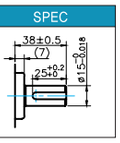
● GEARBOX MODEL:
9PBK□BH



● GEARBOX MODEL:
9PFK□BH

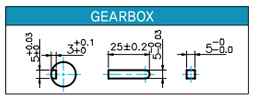


● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

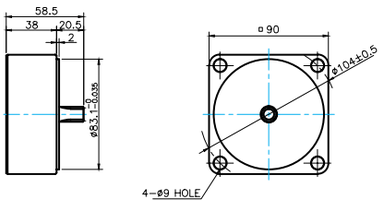
● KEY SPEC

GEARBOX



INTER-DECIMAL GEARBOX

● MODEL:
9XD10□□



WEIGHT

PART		WEIGHT(kg)
MOTOR		3.90
GEAR BOX	9GBK2BMH - 9GBK18BMH	0.78
	9GBK20BMH - 9GBK40BMH	1.10
	9GBK50BMH - 9GBK200BMH	1.20
	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9CSDG□-40G+9GBK□BMH	9CSDG□-40P+9PBK□BH

S.C. C&B Motor 60W (□ 90mm)

60W Speed Control Clutch & Brake Motor 60W(□ 90mm)

Motor Specification

Model (9CSDG*-60F2P-C(L): Gear Type Shaft) Connector Type	Lead Wire Type	Output W	Voltage V	Frequency Hz	Poles	Duty	Speed Range r/min	Starting Torque kgfcm	Starting Torque N.m	Permissible Torque 1200r/min kgfcm	Permissible Torque 1200r/min N.m	Permissible Torque 90r/min kgfcm	Permissible Torque 90r/min N.m	Capacitor μF / VAC
9CSDG1(A)-60F2P-C	9CSDG1(A)-60F2P-L	60	1ø110	60	4	Cont.	90-1700	4.00	0.400	5.50	0.550	1.60	0.160	16.0 / 250
9CSDGB-60F2P-C	9CSDGB-60F2P-L	60	1ø100	50	4	Cont.	90-1400	4.20	0.420	5.50	0.550	1.50	0.150	20.0 / 250
				60			90-1700	4.00	0.400	5.50	0.550	1.60	0.160	
9CSDGC-60F2P-C	9CSDGC-60F2P-L	60	1ø200	50	4	Cont.	90-1400	4.20	0.420	5.50	0.550	1.50	0.150	5.0 / 450
				60			90-1700	4.00	0.400	5.50	0.550	1.60	0.160	
9CSDG2(D)-60F2P-C	9CSDG2(D)-60F2P-L	60	1ø220	60	4	Cont.	90-1700	4.00	0.400	5.50	0.550	1.60	0.160	5.0 / 450
9CSDGE-60F2P-C	9CSDGE-60F2P-L	60	1ø220	50	4	Cont.	90-1400	4.00	0.400	5.20	0.520	1.40	0.140	5.0 / 450
			1ø240					4.50	0.450	5.80	0.580	1.60	0.160	

1) Enter the phase & voltage code in the place * within the motor model name.
2) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.
3) For using speed control clutch & brake motor, the gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	2	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
9CSDG*-60F2P	9PBK □BH	1200	110	60	kgfcm	8.9	13.4	16.0	22.3	26.7	33.4	40.1	44.6	50.2	60.2	72.3	80.3	90.8	108.9	130.7	145.2	181.5	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	0.87	1.31	1.57	2.18	2.62	3.27	3.93	4.37	4.92	5.90	7.08	7.87	8.89	10.67	12.81	14.23	17.79	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	8.9	13.4	16.0	22.3	26.7	33.4	40.1	44.6	50.2	60.2	72.3	80.3	90.8	108.9	130.7	145.2	181.5	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	0.87	1.31	1.57	2.18	2.62	3.27	3.93	4.37	4.92	5.90	7.08	7.87	8.89	10.67	12.81	14.23	17.79	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	8.4	12.6	15.2	21.1	25.3	31.6	37.9	42.1	47.5	56.9	68.3	75.9	85.8	103.0	123.6	137.3	171.6	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	0.83	1.24	1.49	2.06	2.48	3.10	3.71	4.13	4.65	5.58	6.70	7.44	8.41	10.09	12.11	13.45	16.82	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
	9PFK □BH	90	110	60	kgfcm	2.6	3.9	4.7	6.5	7.8	9.7	11.7	13.0	14.6	17.5	21.0	23.4	26.4	31.7	38.0	42.2	52.8	63.4	70.8	85.0	94.4	113.3	141.6	169.9	188.8
					N.m	0.25	0.38	0.46	0.64	0.76	0.95	1.14	1.27	1.43	1.72	2.06	2.29	2.59	3.10	3.73	4.14	5.17	6.21	6.94	8.33	9.25	11.10	13.88	16.65	18.50
			220	60	kgfcm	2.6	3.9	4.7	6.5	7.8	9.7	11.7	13.0	14.6	17.5	21.0	23.4	26.4	31.7	38.0	42.2	52.8	63.4	70.8	85.0	94.4	113.3	141.6	169.9	188.8
					N.m	0.25	0.38	0.46	0.64	0.76	0.95	1.14	1.27	1.43	1.72	2.06	2.29	2.59	3.10	3.73	4.14	5.17	6.21	6.94	8.33	9.25	11.10	13.88	16.65	18.50
			220/240	50	kgfcm	2.3	3.4	4.1	5.7	6.8	8.5	10.2	11.3	12.8	15.3	18.4	20.4	23.1	27.7	33.3	37.0	46.2	55.4	62.0	74.3	82.6	99.1	123.9	148.7	165.2
					N.m	0.22	0.33	0.40	0.56	0.67	0.83	1.00	1.11	1.25	1.50	1.80	2.00	2.26	2.72	3.26	3.62	4.53	5.43	6.07	7.29	8.09	9.71	12.14	14.57	16.19

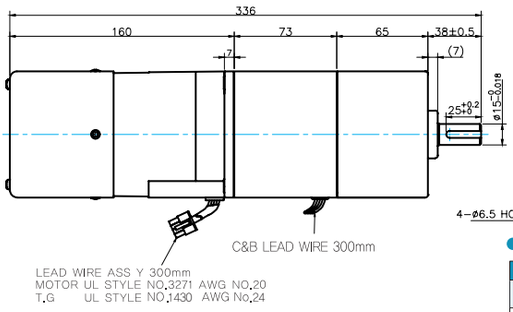
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

Dimensions

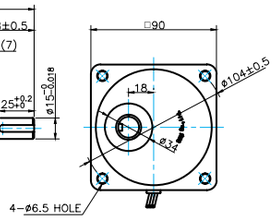
GEARED MOTOR

P TYPE GEARBOX

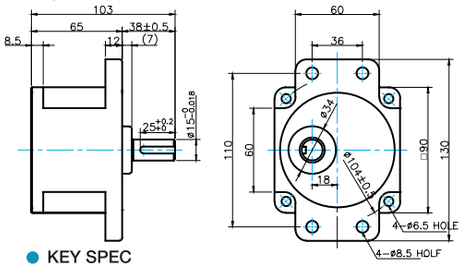
● MOTOR MODEL:
9CSDG□-60F2P-C



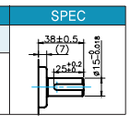
● GEARBOX MODEL:
9PBK□BH



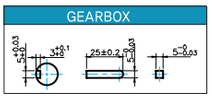
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

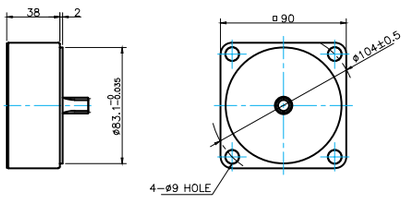
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

GEARBOX


INTER-DECIMAL GEARBOX

● MODEL:
9XD10□□



WEIGHT

PART		WEIGHT(kg)
MOTOR		4.50
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9CSDG□-60F2P+9PBK□BH	9CSDG□-60F2P+9PFK□BH

S.C. C&B Motor 90W (□90mm)

90W Speed Control Clutch & Brake Motor 90W(□90mm)

Motor Specification

Model 9CSDG*-90F2P-C(L): Gear Type Shaft		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9CSDG1(A)-90F2P-C	9CSDG1(A)-90F2P-L	90	1ø110	60	4	Cont.	90-1700	4.50	0.450	6.30	0.630	2.30	0.230	20.0 / 250
9CSDGB-90F2P-C	9CSDGB-90F2P-L	90	1ø100	50	4	Cont.	90-1400	4.70	0.470	5.80	0.580	2.20	0.220	25.0 / 250
				60			90-1700	4.50	0.450	6.30	0.630	2.30	0.230	
9CSDGC-90F2P-C	9CSDGC-90F2P-L	90	1ø200	50	4	Cont.	90-1400	4.70	0.470	5.80	0.580	2.20	0.220	6.0 / 450
				60			90-1700	4.50	0.450	6.30	0.630	2.30	0.230	
9CSDG2(D)-90F2P-C	9CSDG2(D)-90F2P-L	90	1ø220	60	4	Cont.	90-1700	4.50	0.450	6.30	0.630	2.30	0.230	6.0 / 450
9CSDGE-90F2P-C	9CSDGE-90F2P-L	90	1ø220	50	4	Cont.	90-1400	4.50	0.450	5.40	0.540	2.20	0.220	6.0 / 450
			1ø240					5.00	0.500	6.10	0.610	2.30	0.230	

1) Enter the phase & voltage code in the place * within the motor model name.
2) The phase & voltage code A, B, C, D, E contain a built-in thermal protector.
3) For using speed control clutch & brake motor, the gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	2	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
9CSDG*-90F2P	9PBK □BH	1200	110	60	kgfcm	10.2	15.3	18.4	25.5	30.6	38.3	45.9	51.0	57.5	69.0	82.8	92.0	104.0	124.7	149.7	166.3	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	1.00	1.50	1.80	2.50	3.00	3.75	4.50	5.00	5.63	6.76	8.11	9.01	10.19	12.22	14.67	16.30	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	10.2	15.3	18.4	25.5	30.6	38.3	45.9	51.0	57.5	69.0	82.8	92.0	104.0	124.7	149.7	166.3	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	1.00	1.50	1.80	2.50	3.00	3.75	4.50	5.00	5.63	6.76	8.11	9.01	10.19	12.22	14.67	16.30	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	8.7	13.1	15.7	21.9	26.2	32.8	39.4	43.7	49.3	59.1	71.0	78.8	89.1	106.9	128.3	142.6	178.2	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	0.86	1.29	1.54	2.14	2.57	3.21	3.86	4.29	4.83	5.79	6.95	7.73	8.73	10.48	12.57	13.97	17.46	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
	9PFK □BH	90	110	60	kgfcm	3.7	5.6	6.7	9.3	11.2	14.0	16.8	18.6	21.0	25.2	30.2	33.6	38.0	45.5	54.6	60.7	75.9	91.1	101.8	122.1	135.7	162.8	200.0	200.0	200.0
					N.m	0.37	0.55	0.66	0.91	1.10	1.37	1.64	1.83	2.06	2.47	2.96	3.29	3.72	4.46	5.36	5.95	7.44	8.93	9.97	11.97	13.30	15.96	19.60	19.60	19.60
			220	60	kgfcm	3.7	5.6	6.7	9.3	11.2	14.0	16.8	18.6	21.0	25.2	30.2	33.6	38.0	45.5	54.6	60.7	75.9	91.1	101.8	122.1	135.7	162.8	200.0	200.0	200.0
					N.m	0.37	0.55	0.66	0.91	1.10	1.37	1.64	1.83	2.06	2.47	2.96	3.29	3.72	4.46	5.36	5.95	7.44	8.93	9.97	11.97	13.30	15.96	19.60	19.60	19.60
			220/240	50	kgfcm	3.6	5.3	6.4	8.9	10.7	13.4	16.0	17.8	20.1	24.1	28.9	32.1	36.3	43.6	52.3	58.1	72.6	87.1	97.4	116.8	129.8	155.8	194.7	200.0	200.0
					N.m	0.35	0.52	0.63	0.87	1.05	1.31	1.57	1.75	1.97	2.36	2.83	3.15	3.56	4.27	5.12	5.69	7.11	8.54	9.54	11.45	12.72	15.26	19.08	19.60	19.60

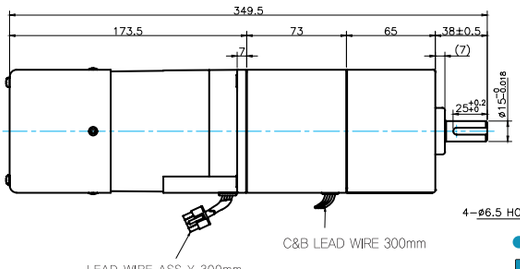
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

Dimensions

GEARED MOTOR

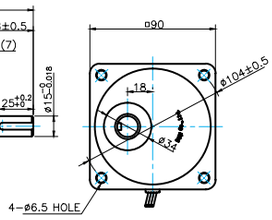
P TYPE GEARBOX

● MOTOR MODEL:
9CSDG□-90F2P-C

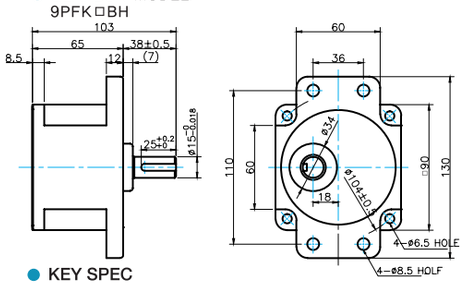


LEAD WIRE ASS Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1430 AWG No.24

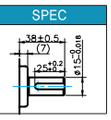
● GEARBOX MODEL:
9PBK□BH



● GEARBOX MODEL:
9PFK□BH

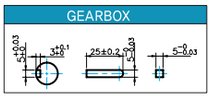


● GEARBOX OUTPUT SHAFT

MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

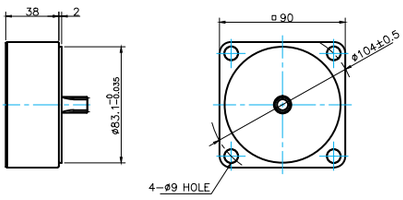
● KEY SPEC

GEARBOX



INTER-DECIMAL GEARBOX

● MODEL:
9XD10□□



WEIGHT

PART		WEIGHT(kg)
MOTOR		4.85
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9CSDG□-90F2P+9PBK□BH	9CSDG□-90F2P+9PFK□BH

S.C. C&B Motor 120W (□90mm)

120W

Speed Control
Clutch & Brake Motor
120W(□90mm)

Motor Specification

Model (9CSDG*-120F2P-C(L): Gear Type Shaft)		Output	Voltage	Frequency	Poles	Duty	Speed Range	Starting Torque		Permissible Torque				Capacitor
										1200r/min		90r/min		
Connector Type	Lead Wire Type	W	V	Hz			r/min	kgfcm	N.m	kgfcm	N.m	kgfcm	N.m	μF / VAC
9CSDG1(A)-120F2P-C	9CSDG1(A)-120F2P-L	120	1ø110	60	4	Cont.	90-1700	5.70	0.570	8.30	0.830	2.80	0.280	25.0 / 250
9CSDG2(D)-120F2P-C	9CSDG2(D)-120F2P-L	120	1ø220	60	4	Cont.	90-1700	5.70	0.570	8.30	0.830	2.80	0.280	6.0 / 400
9CSDGE-120F2P-C	9CSDGE-120F2P-L	120	1ø220	50	4	Cont.	90-1400	5.70	0.570	8.00	0.800	2.80	0.280	6.0 / 400
			1ø240					6.20	0.620	8.60	0.860	2.90	0.290	

1) Enter the phase & voltage code in the place * within the motor model name.
2) The phase & voltage code A, D, E contain a built-in thermal protector.
3) For using speed control clutch & brake motor, the gearbox has to be attached. (Output shaft of motor: Gear Type Shaft)

Max. Permissible Torque at Output Shaft of Gearbox

Motor Model	Gear box Model	r/min	V	Hz	Gear Ratio	2	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
9CSDG*-120F2P	9PBK □BH	1200	110	60	kgfcm	13.4	20.2	24.2	33.6	40.3	50.4	60.5	67.2	75.7	90.9	109.1	121.2	137.0	164.3	197.2	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	1.32	1.98	2.37	3.29	3.95	4.94	5.93	6.59	7.42	8.91	10.69	11.88	13.42	16.11	19.33	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220	60	kgfcm	13.4	20.2	24.2	33.6	40.3	50.4	60.5	67.2	75.7	90.9	109.1	121.2	137.0	164.3	197.2	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	1.32	1.98	2.37	3.29	3.95	4.94	5.93	6.59	7.42	8.91	10.69	11.88	13.42	16.11	19.33	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
			220/240	50	kgfcm	13.0	19.4	23.3	32.4	38.9	48.6	58.3	64.8	73.0	87.6	105.1	116.8	132.0	158.4	190.1	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
					N.m	1.27	1.91	2.29	3.18	3.81	4.76	5.72	6.35	7.15	8.58	10.30	11.45	12.94	15.52	18.63	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
	9PFK □BH	90	110	60	kgfcm	4.5	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	200.0	200.0	200.0
					N.m	0.44	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	19.60	19.60	19.60
			220	60	kgfcm	4.5	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	200.0	200.0	200.0
					N.m	0.44	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	19.60	19.60	19.60
			220/240	50	kgfcm	4.5	6.8	8.2	11.3	13.6	17.0	20.4	22.7	25.6	30.7	36.8	40.9	46.2	55.4	66.5	73.9	92.4	110.9	123.9	148.7	165.2	198.2	200.0	200.0	200.0
					N.m	0.44	0.67	0.80	1.11	1.33	1.67	2.00	2.22	2.50	3.00	3.61	4.01	4.53	5.43	6.52	7.24	9.06	10.87	12.14	14.57	16.19	19.43	19.60	19.60	19.60

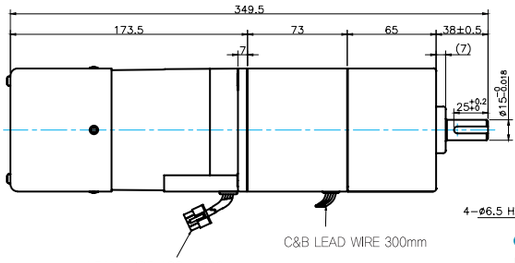
1) Enter the phase & voltage code in the place * within the motor model name.
2) Enter the gear ratio in the place of □ within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft ; a white background indicates the rotation in the opposite direction.

Dimensions

GEARED MOTOR

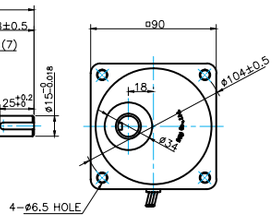
P TYPE GEARBOX

● MOTOR MODEL:
9CSDG□-120F2P-C

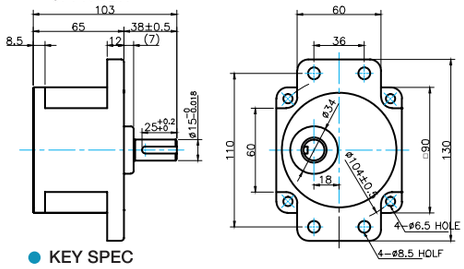


LEAD WIRE ASS Y 300mm
MOTOR UL STYLE NO.3271 AWG NO.20
T.G UL STYLE NO.1430 AWG No.24

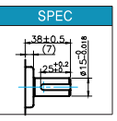
● GEARBOX MODEL:
9PBK□BH



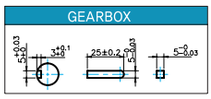
● GEARBOX MODEL:
9PFK□BH



● GEARBOX OUTPUT SHAFT

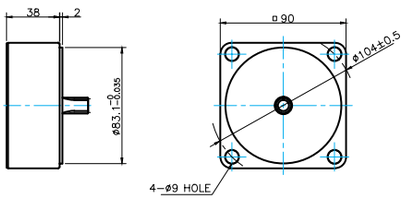
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

● KEY SPEC

GEARBOX


INTER-DECIMAL GEARBOX

● MODEL:
9XD10□□



WEIGHT

PART		WEIGHT(kg)
MOTOR		4.85
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.30
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9XD10○○	0.60

*The output flange and shaft are sold separately.

Motor Images

9CSDG□-120F2P+9PBK□BH	9CSDG□-120F2P+9PFK□BH

Ott Antriebstechnik
Standardisierte Individualität

Wir kombinieren Elektronik und Mechanik für Sie. Und das seit über 70 Jahren.

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Kataloge entdecken

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