

Induction Motor 90W(□ 90mm)

90W Induction Motor 90W(□ 90mm)

Motor 사양

Model		Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque		Rated Load			Capacitor μF / VAC	
91DG*-90F(-T): Gear Type Shaft 91DD*-90F(-T): D-Cut Type Shaft 91DK*-90F(-T): Key Type Shaft	Lead Wire Type						Terminal Box Type	kgfcm	N.m	Speed r/min	Current A		Torque kgfcm N.m
91D◇1(A)-90F□	91D◇1(A)-90F□-T	90	1φ 110	60	4	Cont.	5.00	0.500	1600	1.80	5.48	0.548	20.0 / 250
91D◇B-90F□	91D◇B-90F□-T	90	1φ 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	
91D◇C-90F□	91D◇C-90F□-T	90	1φ 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	
91D◇2(D)-90F□	91D◇2(D)-90F□-T	90	1φ 220	60	4	Cont.	5.00	0.500	1600	1.00	5.48	0.548	5.0 / 450
91D◇E-90F□	91D◇E-90F□-T	90	1φ 220	50	4	Cont.	5.30	0.530	1300	0.70	6.74	0.674	5.0 / 450
			1φ 240				6.30	0.630		0.76	6.74	0.674	
91D◇3(G)-90F□	91D◇3(G)-90F□-T	90	3φ 220	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	
			3φ 230	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	
91D◇J-90F□	91D◇J-90F□-T	90	3φ 200	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	
			3φ 220	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	
91D◇4(K)-90F□3	91D◇4(K)-90F□-T	90	3φ 380	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	
			3φ 400	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	
91D◇5(L)-90F□	91D◇5(L)-90F□-T	90	3φ 415	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	
			3φ 440	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) 모터 모델명 * 자리에는 전압코드가 들어갑니다. 2) 모터 모델명 ◇ 자리에는 모터 출력속 타입명이 들어갑니다. (G: Gear Type / D: D-Cut Type / K: Key Type) Gear Type Shaft는 감속기 부착용이며 D-Cut 및 Key Type Shaft는 모터 단독 사용 시의 출력속입니다. 3) 모터 출력속 타입이 Gear Type일 경우, ◇ 안에는 부착되는 감속기의 모델 타입명이 들어갑니다. 4) 전압코드 A, B, C, D, E, G, J, K, L 은 TP(Thermal Protector) 부착 사양입니다. 5) 삼상 380V~440V 모터에서는 인버터 사용을 할 수 없습니다. 인버터 사용시 권선의 절연이 열화되어 모터가 파손될 수 있습니다.

감속기 부착 시 최대허용토크

60Hz

Motor Model	Gearbox Model	감속비	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	
91DG*-90FP	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	200.0	200.0	200.0	200.0	200.0	200.0	200.0	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	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60
91DG*-90FH	9HBK□BH 9HFK□BH	kgfcm	-	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	217.0	242.4	290.9	300.0	300.0	300.0	300.0	300.0	300.0
		N.m	-	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	21.26	23.76	28.51	29.40	29.40	29.40	29.40	29.40	29.40

Motor Model	Gearbox Model	감속비	10	12	15	18	25	30	36	50	60	Motor Model	Gearbox Model	감속비	5	7.5	10	15	20	25	30	40	50	60	80
91DG*-90FW	9WD□BL/□BR/□BRL	kgfcm	44.9	52.6	63.3	73.0	95.9	108.5	126.2	142.9	122.4	91DG*-90FWH	9WHD□-030	kgfcm	19.1	27.6	35.5	50.0	63.1	72.3	84.2	103.4	118.3	131.5	132.7
		N.m	4.40	5.15	6.20	7.15	9.40	10.63	12.37	14.00	12.00			N.m	1.87	2.71	3.48	4.90	6.19	7.09	8.25	10.14	11.60	12.89	13.00

Motor Model	Gearbox Model	감속비	15	20	25	30	40	50	60	80	100	120	160	200	225	240
91DG*-90FHC	9HC□-◇	kgfcm	60.0	80.0	100.0	120.0	160.0	200.0	240.0	320.0	399.9	479.9	639.9	799.9	899.9	959.9
		N.m	5.88	7.84	9.80	11.76	15.68	19.60	23.52	31.36	39.19	47.03	62.71	78.39	88.19	94.07

50Hz

Motor Model	Gearbox Model	감속비	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
91DG*-90FP	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	200.0	200.0	200.0	200.0	200.0	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	19.60	19.60	19.60	19.60	19.60	19.60	19.60
91DG*-90FH	9HBK□BH 9HFK□BH	kgfcm	-	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	214.3	257.1	287.3	300.0	300.0	300.0	300.0	300.0	300.0
		N.m	-	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	21.00	25.20	28.16	29.40	29.40	29.40	29.40	29.40	29.40

Motor Model	Gearbox Model	감속비	10	12	15	18	25	30	36	50	60	Motor Model	Gearbox Model	감속비	5	7.5	10	15	20	25	30	40	50	60	80
91DG*-90FW	9WD□BL/□BR/□BRL	kgfcm	53.2	62.3	75.0	86.5	113.6	128.6	149.6	142.9	122.4	91DG*-90FWH	9WHD□-030	kgfcm	22.6	32.7	42.1	59.2	74.8	85.7	99.7	122.6	140.3	155.8	132.7
		N.m	5.22	6.11	7.35	8.48	11.14	12.60	14.66	14.00	12.00			N.m	2.21	3.21	4.12	5.80	7.33	8.40	9.77	12.01	13.75	15.27	13.00

Motor Model	Gearbox Model	감속비	15	20	25	30	40	50	60	80	100	120	160	200	225	240
91DG*-90FHC	9HC□-◇	kgfcm	71.1	94.8	118.5	142.2	189.6	237.0	284.4	379.2	474.0	568.8	758.4	948.0	1066.5	1137.6
		N.m	6.97	9.29	11.61	13.94	18.58	23.23	27.87	37.16	46.45	55.74	74.33	92.91	104.52	111.49

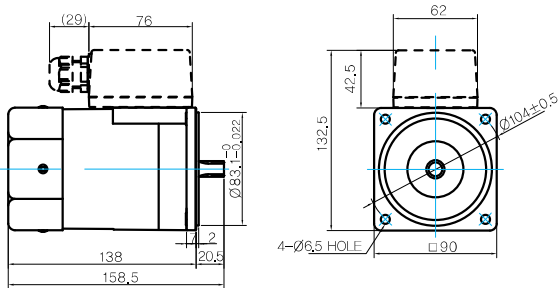
1) 모터 모델명 * 자리에는 전압코드가 들어갑니다. 2) 감속기 모델명 □ 안에는 감속비가 들어갑니다. 3) 위의 표에서 색깔된 범위의 감속비를 선택했을 때 감속기의 출력속은 모터의 출력속과 같은 방향으로 회전합니다. 흰색 바탕 범위의 감속비에서는 감속기 출력속은 모터 출력속의 회전방향과 반대방향으로 회전합니다. 4) 회전속도(r/min)는 모터의 동기회전속도(50Hz:1500r/min, 60Hz:1800r/min)를 감속비로 나누어 계산합니다. 실제 회전속도는 부하의 크기에 따라 표시보다 2~20% 정도 느립니다.

Induction Motor 90W(□ 90mm)

Dimensions

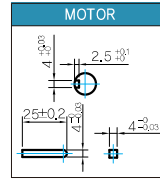
MOTOR ONLY

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



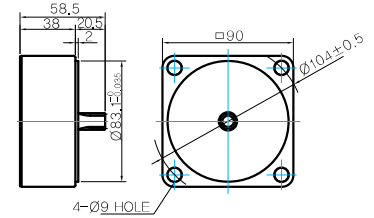
MOTOR OUTPUT SHAFT KEY SPEC

MODEL	SPEC
D-CUT TYPE	37 30 $^{+0.02}$ 11.5 $^{+0.02}$ 11.2 $^{+0.02}$
9IDD□-90F	
KEY TYPE	37 25 $^{+0.02}$ $\phi 11.2$ $^{+0.02}$
9IDK□-90F	



중간감속기

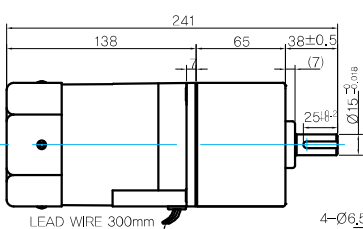
- MODEL: 9XD10□□



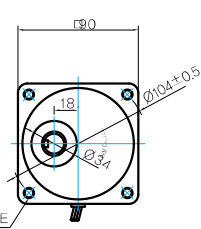
GEARED MOTOR

P TYPE GEARBOX

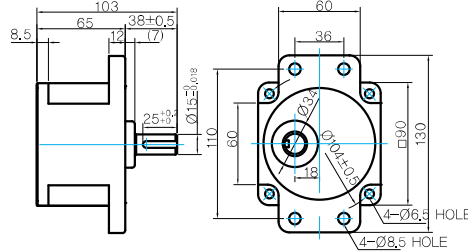
- MOTOR MODEL: 9IDG□-90FP (GENERAL FAN)



- GEARBOX MODEL: 9PBK□BH



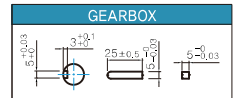
- GEARBOX MODEL: 9PFK□BH



GEARBOX OUTPUT SHAFT

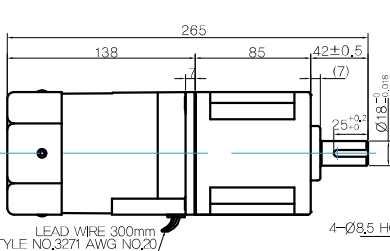
MODEL	SPEC
KEY TYPE	38 25 $^{+0.02}$ 11.5 $^{+0.02}$ 11.2 $^{+0.02}$
9PBK□BH	
9PFK□BH	

KEY SPEC

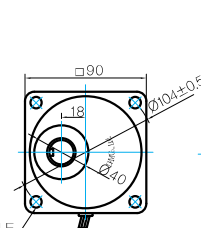


H TYPE GEARBOX

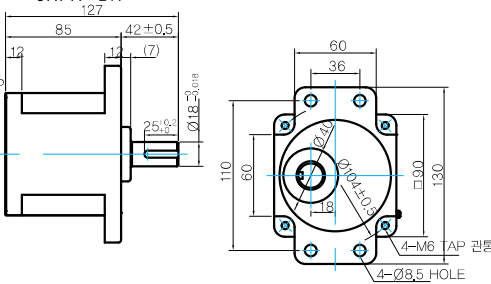
- MOTOR MODEL: 9IDG□-90FH (GENERAL FAN)



- GEARBOX MODEL: 9HBK□BH



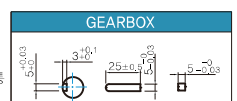
- GEARBOX MODEL: 9HFK□BH



GEARBOX OUTPUT SHAFT

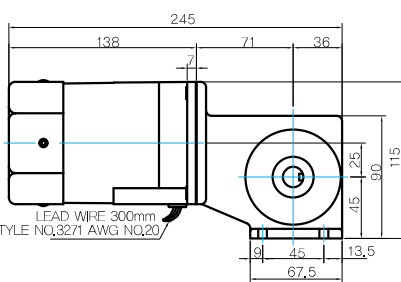
MODEL	SPEC
KEY TYPE	42 25 $^{+0.02}$ 11.5 $^{+0.02}$ 11.2 $^{+0.02}$
9HBK□BH	
9HFK□BH	

KEY SPEC

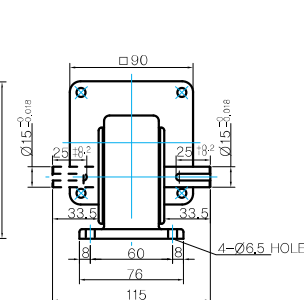


W TYPE GEARBOX

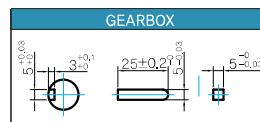
- MOTOR MODEL: 9IDG□-90FW (GENERAL FAN)



- GEARBOX MODEL: 9WD□BL/BR/BRL

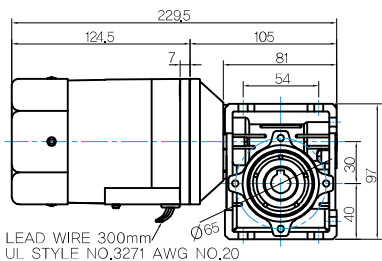


KEY SPEC

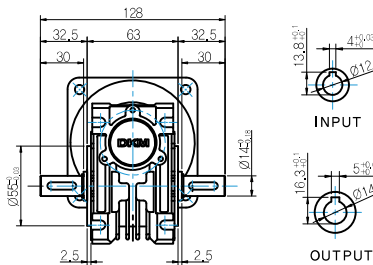


WH TYPE GEARBOX

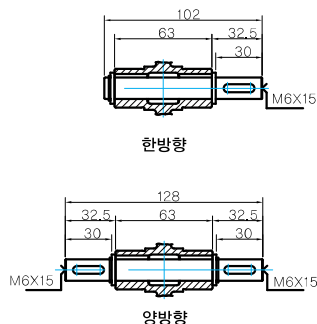
● MOTOR MODEL :
91DG□-90FWH (GENERAL FAN)



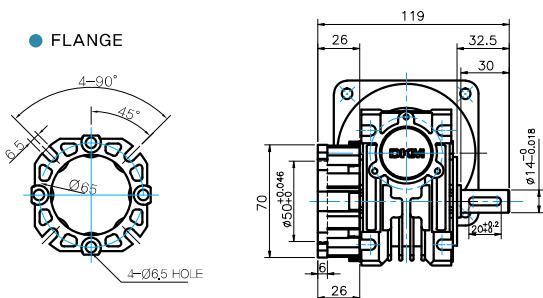
● GEARBOX MODEL :
9WHD□-030



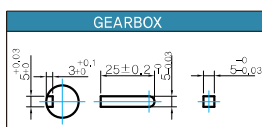
● SHAFT



● FLANGE

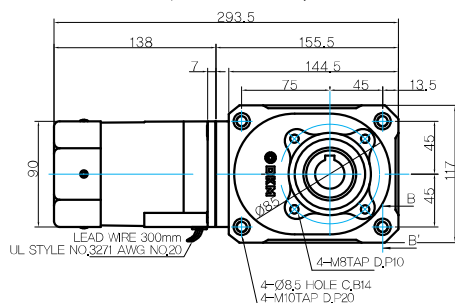


● KEY SPEC

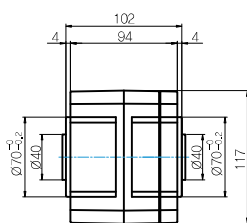


HC TYPE GEARBOX

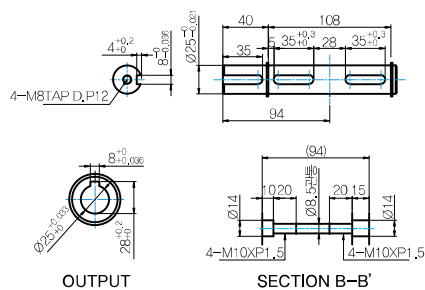
● MOTOR MODEL :
91DG□-90FHC (GENERAL FAN)



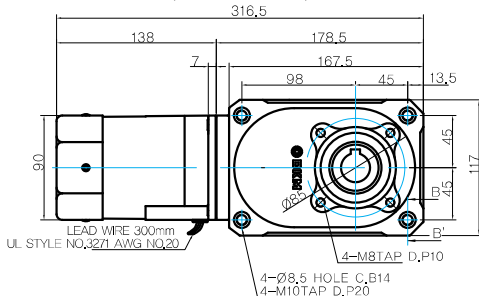
● GEARBOX MODEL :
9HC(15 ~ 60)□



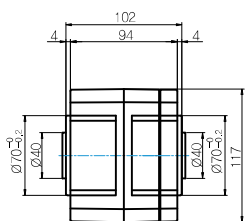
● SHAFT



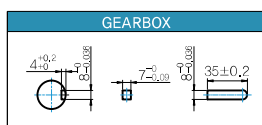
● MOTOR MODEL :
91DG□-90FHC (GENERAL FAN)



● GEARBOX MODEL :
9HC(80 ~ 240)□



● KEY SPEC



WEIGHT

PART	WEIGHT(kg)
MOTOR	3.05
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

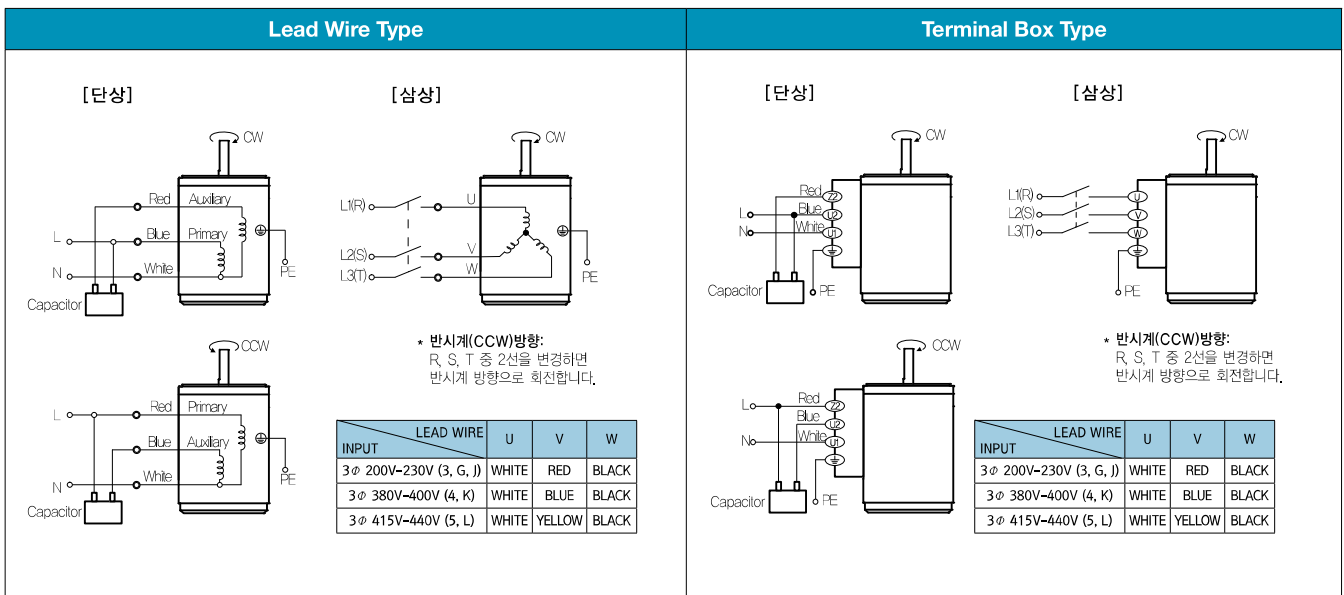
*출력 FLANGE와 SHAFT는 별매입니다.

Induction Motor 90W(□ 90mm)

Motor Images



결선도



1) 회전방향은 모터 축 측에서 본 방향을 나타냅니다.

2) CW는 시계방향, CCW는 반시계방향입니다.

3) 단상 모터의 회전방향 전환은 모터 정지 후에 실시하여 주십시오. 모터 회전 중에 회전방향을 전환하면 방향이 전환되지 않거나 시간이 지체되어 전환되는 경우가 있습니다.