

Brake Motor 90W (□ 90mm)

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Motor 사양

Model 9BDG*-90F□(-T): Gear Type Shaft 9BDD*-90F(-T): D-Cut Type Shaft 9BDK*-90F(-T): Key Type Shaft	Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque kgfcm N.m		Rated Load			Capacitor μF / VAC	
								Speed r/min	Current A	Torque kgfcm N.m		
9BDG1(A)-90F□	90	1φ 110	60	4	30min.	6.49	0.649	1600	2.00	5.48	0.548	25.0 / 250
9BDG2(D)-90F□	90	1φ 220	60	4	30min.	6.11	0.611	1600	1.04	5.48	0.548	6.0 / 450
9BDGE-90F□	90	1φ 220	50	4	30min.	6.07	0.607	1250	0.92	7.01	0.701	6.0 / 450
		1φ 240				7.15	0.715		1.00	7.01	0.701	
9BDG3(G)-90F□	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	
9BDG4(K)-90F□	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	
9BDG5(L)-90F□	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, □ 안에는 부착되는 감속기의 모델 타입명이 들어갑니다. 2) 전압코드 A, D, E, G, K, L은 TP(Thermal Protector) 부착 사양입니다.
 3) Gear Type Shaft는 감속기 부착용이며 D-Cut Type Shaft는 모터 단독 사용시의 출력축입니다.
 4) 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 r/min	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
9BDG*-90FP	9PBK□BH 9PFB□BH	kgfcm N.m	8.9 0.87	13.3 1.30	16.0 1.57	22.2 2.17	26.6 2.61	33.3 3.26	39.9 3.91	44.4 4.35	50.0 4.90	60.0 5.88	72.0 7.06	80.0 7.84	90.4 8.86	108.5 10.63	130.2 12.76	144.6 14.17	180.8 17.72	200.0 19.60	200.0 19.60	200.0 19.60	200.0 19.60	200.0 19.60	200.0 19.60	200.0 19.60	200.0 19.60
9BDG*-90FH	9HBK□BH 9HFK□BH	kgfcm N.m	-	13.3 1.30	16.0 1.57	22.2 2.17	26.6 2.61	33.3 3.26	39.9 3.91	44.4 4.35	50.0 4.90	60.0 5.88	72.0 7.06	80.0 7.84	90.4 8.86	108.5 10.63	130.2 12.76	144.6 14.17	180.8 17.72	217.0 21.26	242.4 23.76	290.9 28.51	300.0 29.40	300.0 29.40	300.0 29.40	300.0 29.40	300.0 29.40

Motor Model	Gearbox Model	감속비 r/min	10	12	15	18	25	30	36	50	60
9BDG*-90FW	9WD□BL/ BR□BRL	kgfcm N.m	44.9 4.40	52.6 5.15	63.3 6.20	73.0 7.15	95.9 9.40	108.5 10.63	126.2 12.37	142.9 14.00	122.4 12.00

Motor Model	Gearbox Model	감속비 r/min	15	20	25	30	40	50	60	80	100	120	160	200	225	240
9BDG*-90FHC	9HC□□	kgfcm N.m	60 5.88	80 7.84	100 9.8	120 11.8	160 15.7	200 19.6	240 23.5	320 31.4	400 39.2	480 47	640 62.7	800 78.4	900 88.2	960 94.1

50Hz

Motor Model	Gearbox Model	감속비 r/min	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
9BDG*-90FP	9PBK□BH 9PFB□BH	kgfcm N.m	10.5 1.03	15.8 1.55	18.9 1.86	26.3 2.58	31.6 3.09	39.4 3.87	47.3 4.64	52.6 5.15	59.3 5.81	71.1 6.97	85.3 8.36	94.8 9.29	107.1 10.50	128.6 12.60	154.3 15.12	171.4 16.80	200.0 19.60	200.0 19.60	200.0 19.60	200.0 19.60	200.0 19.60	200.0 19.60	200.0 19.60	200.0 19.60	200.0 19.60
9BDG*-90FH	9HBK□BH 9HFK□BH	kgfcm N.m	-	15.8 1.55	18.9 1.86	26.3 2.58	31.6 3.09	39.4 3.87	47.3 4.64	52.6 5.15	59.3 5.81	71.1 6.97	85.3 8.36	94.8 9.29	107.1 10.50	128.6 12.60	154.3 15.12	171.4 16.80	214.3 21.00	251.0 25.20	287.3 28.40	300.0 29.40	300.0 29.40	300.0 29.40	300.0 29.40	300.0 29.40	300.0 29.40

Motor Model	Gearbox Model	감속비 r/min	10	12	15	18	25	30	36	50	60
9BDG*-90FW	9WD□BL/ BR□BRL	kgfcm N.m	53.2 5.22	62.3 6.11	75.0 7.35	86.5 8.48	113.6 11.14	128.6 12.60	149.6 14.60	142.9 14.00	122.4 12.00

Motor Model	Gearbox Model	감속비 r/min	15	20	25	30	40	50	60	80	100	120	160	200	225	240
9BDG*-90FHC	9HC□□	kgfcm N.m	71.1 6.97	94.8 9.28	119 11.7	142 13.9	190 18.6	237 23.2	284 27.8	379 37.1	474 46.5	569 55.8	758 74.3	948 92.9	1067 105	1138 112

- 1) 모터 모델명 □ 안에는 전압코드가 들어갑니다. 2) 감속기 모델명 □ 안에는 감속비가 들어갑니다.
 3) 위의 표에서 색칠된 범위의 감속비를 선택했을 때 감속기의 출력축은 모터의 출력축과 같은 방향으로 회전합니다.
 흰색 바탕 범위의 감속비에서는 감속기 출력축은 모터 출력축의 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.

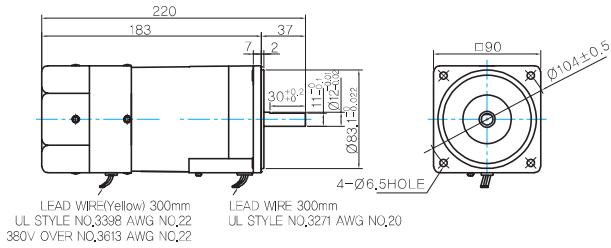
B AC Motors

Brake Motor 90W (□90mm)

Dimensions

MOTOR ONLY

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

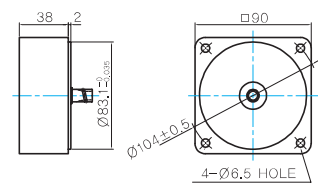


MOTOR OUTPUT SHAFT

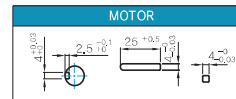
MODEL	SPEC
D-CUT TYPE	
9BDD□-90F	
KEY TYPE	
9BDK□-90F	

중간감속기

- MODEL:
9XD10□□



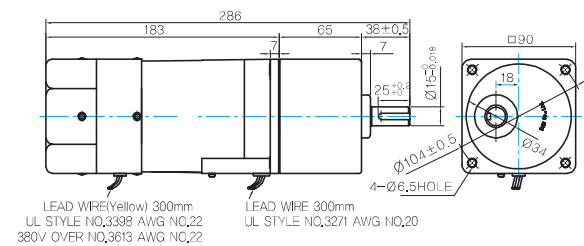
KEY SPEC



GEARED MOTOR

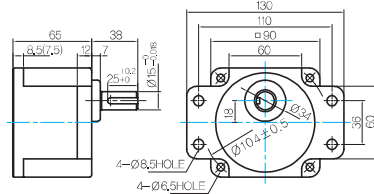
P TYPE GEARBOX

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



- GEARBOX MODEL:
9PBK□BH

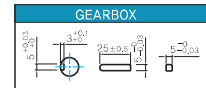
- GEARBOX MODEL:
9PFK□BH



GEARBOX OUTPUT SHAFT

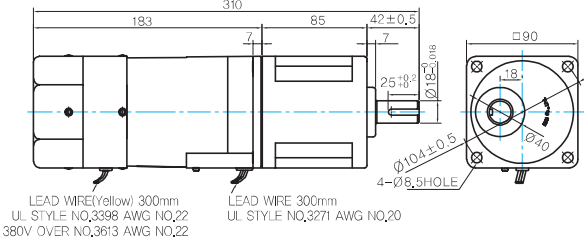
MODEL	SPEC
KEY TYPE	
9PBK□BH 9PFK□BH	

KEY SPEC



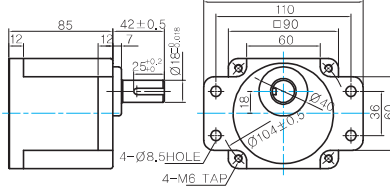
H TYPE GEARBOX

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



- GEARBOX MODEL:
9HBK□BH

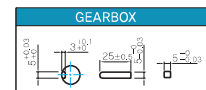
- GEARBOX MODEL:
9HFK□BH



GEARBOX OUTPUT SHAFT

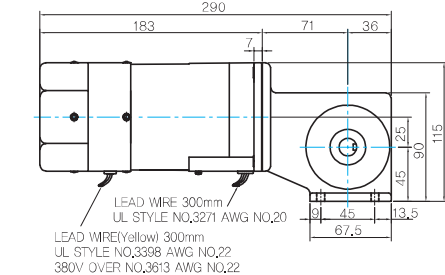
MODEL	SPEC
KEY TYPE	
9HBK□BH 9HFK□BH	

KEY SPEC

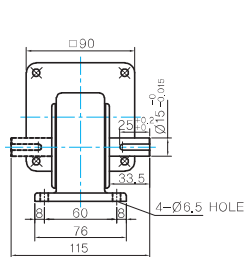


W TYPE GEARBOX

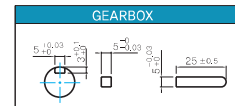
- MOTOR MODEL:
9BDG□-90FW (GENERAL FAN)



- GEARBOX MODEL:
9WD□BL/BR/BRL

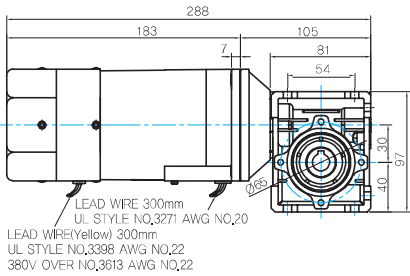


KEY SPEC

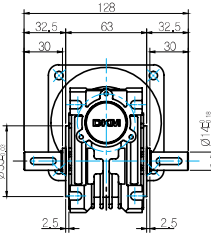


WH TYPE GEARBOX

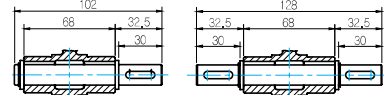
● MOTOR MODEL:
9BDG□-90FWH (GENERAL FAN)



● GEARBOX MODEL:
9WHD□-030

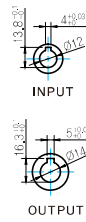


● SHAFT

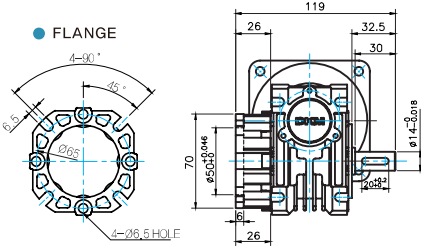


한방향

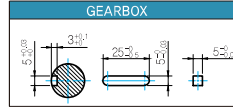
양방향



● FLANGE

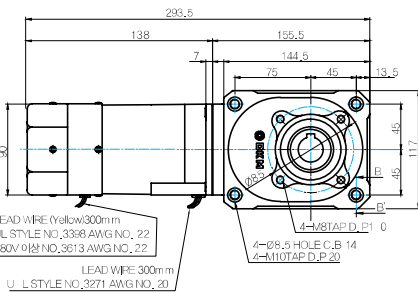


● KEY SPEC

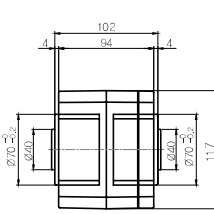


HC TYPE GEARBOX

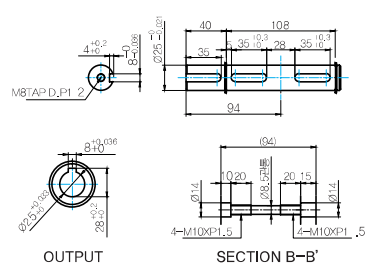
● MOTOR MODEL :
9BDG□-90FHC (GENERAL FAN)



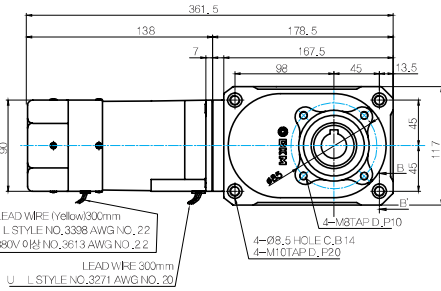
● GEARBOX MODEL:
9HC(15 ~ 60) □



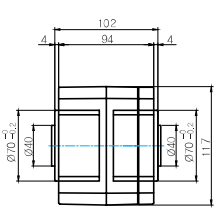
● SHAFT



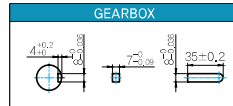
● MOTOR MODEL :
9BDG□-90FHC (GENERAL FAN)



● GEARBOX MODEL :
9HC(80 ~ 240) □



● KEY SPEC



WEIGHT

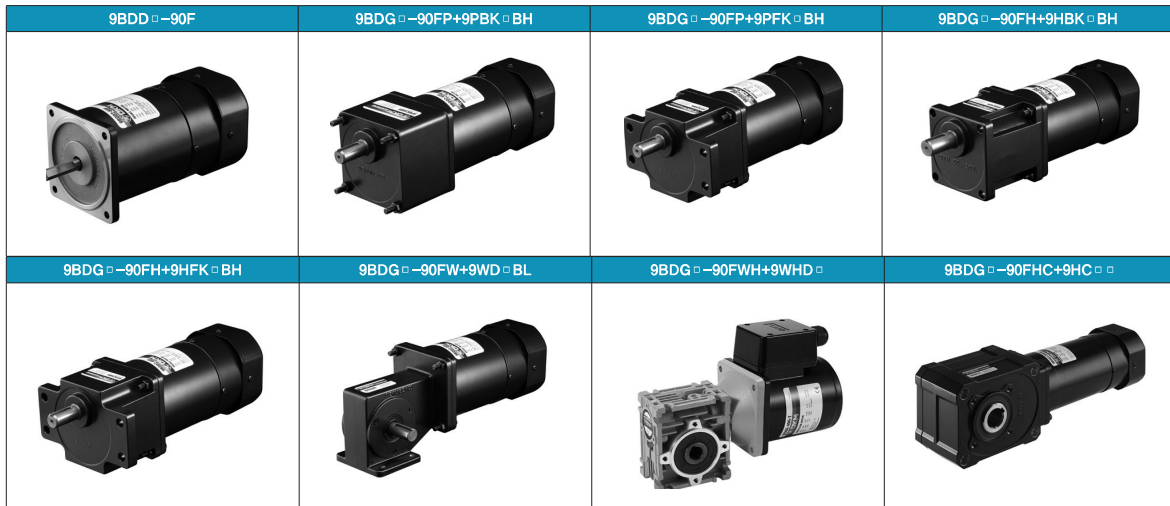
PART	WEIGHT(kg)	
MOTOR	3.05	
GEAR BOX	9PB(F)K2BH - 9PB(F)K10BH	1.28
	9PB(F)K12.5BH - 9PB(F)K20BH	1.3
	9PB(F)K25BH - 9PB(F)K60BH	1.45
	9PB(F)K75BH - 9PB(F)K200BH	1.47
	9HB(F)K3BH - 9HB(F)K10BH	1.62
	9HB(F)K12.5BH - 9HB(F)K20BH	1.68
	9HB(F)K25BH - 9HB(F)K60BH	1.73
	9HB(F)K75BH - 9HB(F)K200BH	1.78
	9WD□BL/BR/BRL	1.0
	9WHD□-030	1.2
9HC15□	4.05	
9HC20□~9HC60□	4.1	
9HC80□~9HC240□	4.75	
9XD10□□	0.6	

* 출력 FLANGE와 SHAFT는 별매입니다.

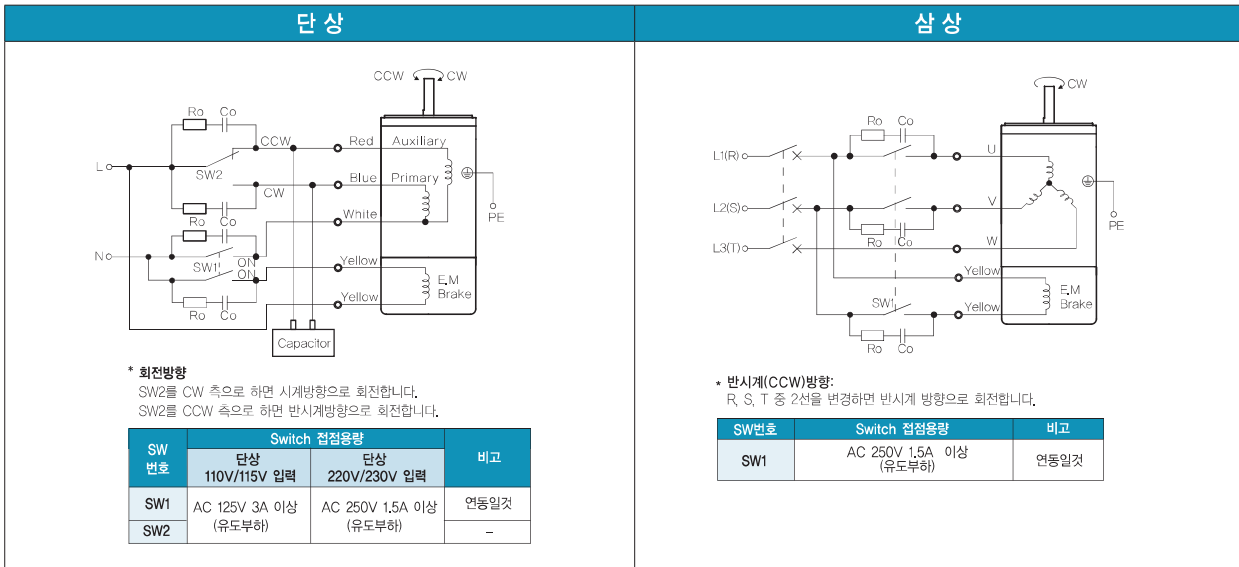
B AC Motors

Brake Motor 90W (□ 90mm)

Motor Images



결선도



- 1) 회전방향은 모터 축 측에서 본 방향을 나타냅니다.
- 2) CW는 시계방향, CCW는 반시계방향입니다.
- 3) SW1은 모터의 운전/정지와 전자브레이크 조작용입니다. (연동)
- 4) SW1을 ON으로 하면 브레이크는 해제되고 모터를 회전하며, OFF로 할 경우 모터는 정지하며 브레이크가 작동합니다.
- 5) 모터가 정지한 상태에서 브레이크를 해제할 때에는 SW1을 비연동으로 하고 노란색 리드선 측 스위치만 ON으로 합니다.
- 6) Ro, Co는 Surge 전압 흡수용 CR회로입니다. [Ro=5~200Ω, Co=0.1~0.2μF, 200WV (400WV)]